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AUTHOR Bobbett, Gordon C.; And Others
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ABSTRACT

This study identified common characteristics in six "good" secondary schools in the rural Appalachian regions of Kentucky and Tennessee. Three schools from each state were selected for study based on nominations by Chief State School Officers and local superintendents and ratings based on statistical information about the schools. Two researchers made site visits at each of the six schools to: (1) interview the principal, a counselor, and nine faculty; (2) administer the Wayson School Climate and Context Inventory; (3) administer an 18-item survey delineating Likert's Organizational Characteristics in terms of administrative and faculty relationships; and (4) collect anecdotal data based on observations in the school. The data collected were initially analyzed as unique sets of data, then combined to describe the six schools in the study as fully as possible. Findings from the integration of data sources were then compared with 16 composite indicators of goodness and findings from two earlier studies. Findings indicate that these schools share positive features in climate, outcome orientation, and administrative structures. Similarities and differences were found between this study and the 16 composite indicators of goodness. This document contains numerous appendices that provide the three instruments and tabulated data collected with the instruments. (38 references) (KS)

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A STUDY OF "GOODNESS" IN SIX RURAL APPALACHIAN HIGH SCHOOLS

Dr. Gordon C. Bobbett
Educational Consultant
Louisville, TN 37777

Dr. Kenneth Henry
Union College
Barbourville, KY 40906

Dr. Russell L. French
University of Tennessee
Knoxville, TN 37996

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Appalachia Education Laboratory,
1031 Quarrier Street, P.O. Box 1348 Charleston, WV 25325
phone: 800/624-9120

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A STUDY OF "GOODNESS" IN SIX RURAL APPALACHIAN HIGH SCHOOLS

I. INTRODUCTION

A large proportion of the American educational enterprise is conducted in rural schools. According to the National Center for Educational Statistics, nearly two-thirds of all school districts, one-half of all public schools, and one-third of teachers are found in rural contexts (cited in DeYoung, 1987). With such a prominent role in American education, rural schools research should be rich and diverse. The exact opposite is true, however. DeYoung (1987) cites the lack: "Nationally published accounts of the strengths and weaknesses of rural school performance in the U.S, today are few and far between" (p. 129).

The past decade witnessed a rise in the implementation of "effective schools research" strategies across a wide spectrum of schools and settings, yet the study of effectiveness in rural schools was left untapped for the most part. Perhaps DeYoung (1987) was correct when he stated: "...Much of the scholarship on rural education in this country is relatively unsophisticated compared with most other research found in mainstream educational research journals" (p. 141), or perhaps the phenomenon of effective rural schools is an oxymoronic combination in the mind of many researchers.

II. PURPOSE OF THE STUDY

> Rural, small districts continue to be an important component of the public school enterprise in the United States. They are to be found in significant numbers in virtually all states. Depending on how one defines them, they represent approximately two-thirds of the public school systems in the nation and are responsible for the education of from one-fourth to one-third of the public elementary/secondary school-age population (Stephens, 1988, p. 1).

The researchers[1] sought to identify common characteristics in six "good" secondary schools in the rural Appalachian regions of Kentucky and Tennessee. While the multitude of problems and shortcomings of rural schools have been delineated, the authors could find few studies that described the workings of good, rural schools.

Four premises undergirded this study: (1) Good high schools exist in the rural Appalachian regions of Kentucky and Tennessee; (2) These schools could be identified and described in a way that would add to the knowledge-base about improving rural schools; (3) Appalachian school leaders may reject many improvement models because they view them as having little applicability to schools in their setting; and (4) Appalachian school leaders would be more likely to accept findings regarding good schools based on research in rural Appalachian schools.

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[1] The investigators wish to acknowledge the contributions of Dr. Charles M. Achilles who provided resourse materials, technical assistance and editorial review.

III. REVIEW OF THE RELATED LITERATURE

During the past decade three differing approaches to the study of school performance in the United States emerged. These approaches included the effective schools research, the excellence movement, and research on good schools. Each approach has its own discrete connotation related to the workings of schools, and hence, subtle differences as well as similarities across the findings from the various studies can be noted.

The effective schools research concentrated on elementary schools and focused primarily on standardized test outcomes in reading and mathematics. In order for a school to be considered effective, a high proportion of students had to reach minimum levels of mastery in these two curricular areas (Austin, 1979). Edmonds (1982) argued that effective schools have a high proportion of all students, whether economically and socially disadvantaged or not, reaching minimum levels of reading and mathematics performance. Studies of these schools produced eight significant characteristics associated with effectiveness (Austin, 1979; Brandt, 1982; Edmonds, 1982, 1984; Sergiovanni, 1984; and Squires 1980) (see Figure 1).

The excellence movement emerged primarily as a reaction to American loss of marketshare to foreign competition, diminished defense capabilities, and falling test scores (Howe, 1983). This movement manifested itself via thirty national reports and three hundred state task forces (Cross, 1984) focusing primarily on the nation's high schools. The lead report for the excellence movement was A Nation At Risk (National Commission on Excellence, 1983), but common elements across the various reports and task forces can be identified. These are (1) higher standards; (2) strengthened graduation requirements; (3) a required core curriculum; (4) more math, science, and foreign languages; (5) competency testing; (6) longer school days and years; and (7) tougher discipline (Passow, 1983). Although it created much attention, research related to excellence is not prevalent.

As the decade progressed, the proposition of good schools became a research focus. Goodlad (1983), Boyer (1984), and Lightfoot (1983) produced major works related to this theme. Research on school goodness also began to appear, and much of this research was based on secondary as well as elementary schools. Lightfoot's (1983) The Good High School developed six findings common among good high schools. Frymier's, et al. (1984) One Hundred Good Schools developed twelve findings related to good schools. Wayson's (1988) School Climate and Context Inventory outlined eight areas of practice (based on several years of research) related to school goodness (see Figure 1).

Research on rural schools during the past decade, whether related to effective schools or to good schools, is sparse. Three relevant studies were found, however. Horn (1987) studied 80 small, rural Kansas

FRYMIER--100 GOOD SCHOOLS[1]

1. The school is part of a community-wide education program.
2. School goals are clear, balanced, understood, and permeate the activities of the school.
3. Program planning is primarily the responsibility of the schools staff.
4. The school has a positive climate reflected in challenging and rewarding work.
5. Variety is used in teaching resources and materials.
6. Progress is monitored often and is satisfactory in relation to the schools' goals.
7. Students participate.
8. Parents and general publics participate.
9. The library and other learning resources are fully used.
10. Students are helped to become independent learners.
11. The principal maintains good human relations and uses shared decision-making.
12. Teachers continually grow and renew.

WAYSON-SCHOOL CLIMATE AND CONTEXT[2]

1. Staff enjoy cooperative problem solving to improve environment and outcome.
2. Cooperative decision-making is utilized.
3. Students feel that they belong and are well-served by the school.
4. Staff consider discipline to be learned behavior and teach proper behavior through norms.
5. Teachers seek out and use curricula and instruction to reach all students.
6. Staff deal with outside problems of students before they become unacceptable behavior in the school.
7. Teachers have confidence and use facilities effectively.
8. Staff relate well with all publics served by the school.

EFFECTIVE SCHOOLS RESEARCH FINDINGS[3]

1. Strong leadership.
2. Principal is instructional leader.
3. Safe, orderly climate.
4. Caring teachers with high expectations for students.
5. Regular monitoring of student progress.
6. Shared sense of purpose and goals.
7. Emphasis on effective instruction.
8. Use of positive reinforcement rather than punishment.

LIGHTFOOT--GOOD HIGH SCHOOLS[4]

1. Have imperfections, recognize them, and work to address them.
2. Have permeable boundaries and exhibit institutional control.
3. Have leaders who practice leadership via "masculine and "feminine" qualities.
4. Allow teachers autonomy and the freedom to exercise their roles as adults.
5. Establish positive, empathetic relationships with students.
6. Provide safe, regulated environments.

HORN--EFFECTIVE KANSAS SMALL SCHOOLS[5]

HIGHEST RATED INDICATORS OF EFFECTIVENESS

1. Creative teaching exists.
2. There is good student and teacher attendance.
3. Clear standards of conduct are established.
4. Principals provide strong leadership.
5. Parents feel involved and belong.

BARKER--SMALL EFFECTIVE SCHOOLS[6]

SMALL SCHOOL STRENGTHS SUPPORTING EFFECTIVE SCHOOLS

1. Orderly, safe, serious, attractive school climate.
2. Clear school mission.
3. Strong administrative leaders who emphasize instruction.
4. High expectations for student achievement.
5. Presence of student, staff, and school evaluation systems.
6. Supportive home/ school relations.

[1] Frymier, J. et al. (1984). [2] Wayson, W. W. (1988). [3] Austin, G. (1979); Brandt, R. (1982); Edmonds, R. R. (1982, 1984); Sergiovanni, T. J. (1984); Squires, D. A. (1980). [4] Lightfoot, S. L. (1983). [5] Horn, J. G. (1987). [6] Barker, B. O. (1986).

Figure 1. Research related to Effectiveness/Goodness

schools and found that five indicators of effectiveness were rated above other indicators in these schools (see Figure 1). Barker (1986) reviewed the literature on small, rural schools and found that six strengths associated with these schools support the findings from the effective schools research (see Figure). These are indicative of rural schools' advantages identified by others (Deal & McNutt, 1979; Nachtigal, 1980; Lewis, et al., 1981).

The third study, Forty Rural Schools (Talbert, Fletcher, Jr., & Phelps, 1987) used the same instrumentation as the One Hundred Good Schools study in forty rural middle Tennessee schools. This study noted thirteen major differences between these schools and Frymier's good schools (see Figure 2). Horn (1987) also identified the five lowest rated indicators of effectiveness among the eighty small, rural Kansas schools in his study (see Figure 2). The findings from these two studies support the rural schools' disadvantages identified by others (Lewis, et al., 1981; Tillman, 1983).

In attempting to study good schools, Lightfoot (1983) admonishes: "The search for `good' schools is elusive and disappointing, if by goodness we mean something close to perfection. Good schools reveal imperfections, uncertainties, and vulnerabilities..." (p. 309). The search for good high schools must take an holistic approach. Lezotte (1984) questions the applicability of the effective schools research paradigm to secondary schools. Due to the nature of the high school curriculum, Lezotte questions whether there are direct, identifiable measures that correlate to effectiveness as reading and mathematics achievement do in elementary schools. Also, Lezotte argues that the secondary school is a more complex organization than the elementary school, thereby necessitating multiple measures of effectiveness in terms of curricular outcomes and leadership practices.

Lightfoot (1986) argues that goodness is not "...a static or absolute quality that can be quickly measured by a single indicator of success or effectiveness" (p. 13), nor is it "...a reducible quality that is reflected simply in achievement scores, numbers of graduates attending college, literacy rates, or attendance records" (p. 13). She (1983) further cautions:

> Not only has the search for good schools been absolutist in quality, it has also been encumbered by the negative tones of social science inquiry--the tendency for researchers to uncover malignancies rather than health. Inevitably this search finds no winners.
>
> A more modest orientation towards goodness does not rest on absolute or discrete qualities of excellence, but on views of institutions that anticipate change, conflict, and imperfection (p. 312-13).

Based on a composite review of the research findings above, and tempered by Lightfoot's and Lezotte's cautions, sixteen indicators of school goodness can be developed. These indicators are related to four broad areas: (1) school climate, (2) school mission and goals, (3) leadership, and (4) instruction (Figure 3).

Forty Rural Schools[1] findings compared to **One Hundred Good Schools**[2] findings

1. More traditional educational values.
2. Less community support.
3. Fewer resources with which to work.
4. Lower levels of commitment.
5. Attained fewer of their goals.
6. Focused less on critical thinking.
7. Used less instructional variety and focused more on the textbook.
8. Held lower academic expectations.
9. Had more authoritarian leadership.
10. Had less involvement in decision-making.
11. Had lower levels of cooperation.
12. Recognized good work less frequently.
13. Reflected less concern for others.

Kansas Small Schools[3] study's lowest rated indicators of effectiveness

1. Students have good work ethic.
2. Parents feel involved and have a feeling of belonging to an educational partnership.
3. Schools provide emotional support.
4. Schools prepare students for the world of work.
5. Principals provide instructional leadership.

[1] Talbert, E. G., Fletcher, Jr., R. K., & Phelps, M. S. (1987). [2] Frymier, et al. (1984).
[3] Horn, J. G. (1987).

Figure 2. Rural Schools--Weakness/shortcoming based on research findings.

GOOD SCHOOLS

A. SCHOOL CLIMATE
   1. Have a safe, orderly climate
   2. Have positive, caring relations with students
   3. Have positive relations with outside constituencies
   4. Have clear standards of conduct

B. MISSION/GOALS
   5. Have a clear mission and goals
   6. Have a shared sense of purpose
   7. Engage in regular evaluation of students and school programs

C. LEADERSHIP
   8. Have strong instructional leadership
   9. Have good human relations
   10. Use shared decision-making, problem-solving, and program planning
   11. Promote teacher autonomy and continuous growth and renewal

D. INSTRUCTION
   12. Emphasize effective instruction
   13. Utilize variety in instruction
   14. Use facilities and resources effectively
   15. Promote independent learning
   16. Use positive reinforcement

Figure 3 Indicators of Goodness--composite from other findings.

IV. DESIGN OF THE STUDY

The study involved two steps: (1) identification of "good" schools to be in the study; and (2) development of a data base that could be used to describe those schools. The first step ensured that by some measure, there were quality schools in the study; the second ensured a complete description. This is a mixed-method study, a study using multiple data sources.

A. Selection of the Schools

A double loop process was used to select the schools for the study. First, the Chief State School Officers (CSSO) in Kentucky and Tennessee were asked to identify the rural Appalachian districts in their states where the best high schools could be found. (Appalachian Tennessee has 46 rural county school districts; Appalachian Kentucky has 32 county and 16 rural independent school districts). The Kentucky CSSO identified six districts. The researchers selected six Tennessee districts based on their performance on the measures in Tennessee's Report Card on schools. The superintendent of each district agreed to participate and nominated a high school. The following data were collected for each school:

1. average student performance on state competency tests;
2. average student performance on ACT/SAT examinations;
3. dropout rates;
4. percentage of students continuing onto post-secondary education (defined as any institution qualifying for federal student financial aid);
5. responses to a 16-item survey by all teachers in each school, by a sample of students in each school, and by a sample of members of the community served by each school (Appendix A).

Perceptions (below: items 1-3, totaling 50 points) and identifiable, measurable school attributes (items 4-8, totaling 40 points) were collectively evaluated. To facilitate selection to three schools from each state for visitation and participant interviews, a point ranking of the available data was developed using weights based on a scheme of relative importance:

1. Teacher discrepancy rating between the perceived importance and current performance on the survey--15 points (lower differences between expectation and performance received more points);
2. Student discrepancy rating between the perceived importance and current performance on the survey--15 points (lower discrepancies between expectation and performance received more points);
3. Community discrepancy rating between the perceived importance and current performance on the survey--20 points (lower discrepancies between expectation and performance received more points);
4. Student performance on state competency tests--5 points (larger scores received more points);
5. Student performance on ACT/SAT examination--10 points (larger scores received more points);
6. Dropout rates--10 points (smaller rates received more points);
7. Percentage of students continuing onto post-secondary education--5 points (larger scores received more points);
8. Graduation rate--10 points (larger scores received more points).

For each of the eight areas ranked, the total points available were divided by six, i.e., the number of places to be awarded, and points were awarded to each school based on its performance relative to other schools in its state in that area. Total points were then determined for each school, and the final selection of schools to be visited was based on the overall point total (Appendix B).

B. Research Activities in the Schools

Three schools in each state with the highest point totals were selected for study. Two researchers made site visits at each of the six schools and conducted four types of activities:

1. Interviews with the principal, a counselor, and nine faculty;
2. Administration of the Wayson School Climate and Context Inventory (Appendix C);
3. Administration of an 18-item survey delineating Likert's Organizational Characteristics in terms of administrative/faculty relationships (Appendix D);
4. Collection of anecdotal data based on observations in the school (research by wandering around--RBWA).

The results of these data collection processes were combined with the data collected from the earlier survey (School Effectiveness Inventory) to try to create descriptions of these schools.

In recent years, the multiple data source technique has been used to advantage in program and personnel assessment by Furtwengler, French, et al. (1988), French, Furtwengler, et al. (1984), the Alabama Department of Education (1991), and the RJR Nabisco Foundation's Next Century Schools Assessment Team (1991) to obtain balanced, comprehensive pictures of both program and personnel performance. In the multiple data source portrayal, an attempt is made to analyze process, performance and perceptions. Data from the several assessment instruments and procedures used are compared, and an attempt is made to identify patterns of information which cast light on the entity being assessed. The researchers determined that the multiple data source technique was most appropriate to identification of elements of "goodness" in the schools under investigation.

C. Interview Activities and Interview Questions (IQ)

Using a semi-structured interview schedule, researchers interviewed a cross-sectional representation of faculty in each school: a counselor, the principal, and nine teachers (two English, three math/science, two social studies, one arts, and one teacher from another area). The eight interview questions (IQ) were:

1. Should a high school education focus more on developing individual potential or on preparation for life after high school?
2. What do you perceive to be the general mission of the American high school?
3. Does your school have a unique mission, other than the general mission of the American high school?
4. Does your school have specific goals to support its mission? What are they?
5. Have the school's mission and goals been communicated to teachers and students in this school? How?
6. Does your school have a process for evaluating its success in relation to its mission/goals? (If yes, please explain?)
7. We have identified your school as an excellent school in the Appalachian region. What factors do you feel contribute to your excellence?
8. How does the principal exercise his/her role as leader of the school? What does he/she do to contribute to the success of the school?

In one-on-one settings, the interviewer recorded the essence of the responses to each question and any pertinent quotations. Content analysis of responses to each question was performed and used to develop coding categories. Two researchers read the interview reports and coded the responses for each question. Inter-rater agreement was estimated at 0.92 for this activity. Total interview data are presented in Appendix E.

D. The Wayson School Climate and Context Inventory (SCCI)

The SCCI inventory provides data as to how the school is perceived as an organization. Wayson (1982, 1988) concludes that these eight factors constitute the climate within which students and teachers

accomplish their tasks. For the present study, 20 faculty from each school were randomly selected to complete the SCCI.

To develop data about the general school climate as perceived by staff, an analysis of the 120 responses from the six schools was conducted by examining means for each item and for each of the eight clusters of items of the inventory. The inventory assesses eight areas of organizational life: involvement in rule making; emphasis on learning; practices with which people cope in their lives outside of school; open transactions with members of the public outside the school; and environments. Wayson's eight climate areas and corresponding items are:

1. Staff members in good schools work together to solve problems and to improve the learning environment and outcomes (items 1-5, 37);
2. Staff members in good schools involve more people in making decisions, and they eliminate the status barriers that inhibit communication, teaching and learning (items 6-9, 41, 42, 44);
3. Staff in good schools make every student feel that he or she belongs in the school and is served well by it (items 10-15, 39, 40);
4. Staff members in good schools consider discipline to be a set of learned attitudes and behaviors and they teach them primarily by engaging students in the norms governing school life (items 16-19, 38, 45);
5. Staff members in good schools seek out and use curricula and instructional methods designed to reach all their students (items 20-23);
6. Staff members in good schools deal directly with students' personal problems before they manifest themselves in antisocial or unproductive behaviors (items 24-27);
7. Staff members in high confidence schools use the physical facilities in ways that enhance the learning environment and reinforce productive and effective relationships (items 28-31, 36, 43);
8. Staff members in good schools relate well with parents and other community members, welcoming them into the school and classrooms and meeting them comfortably in their homes and neighborhoods (items 32-35).

E. Likert's Organizational Characteristics (LOC)

The third set of data developed in the project used Likert's (Dowling, 1978) categories of organizations as System 1, System 2, System 3, or System 4 based on administrative climate ranging from autocratic (System 1) to fully participatory (System 4) in terms of six sets of organizational variables (leadership, motivation, communication, decisions, goals, and control). Data were analyzed for each school, each state, and the total sample in relation to the individual survey items as well as the six areas included on the survey.

F. Research By Wandering Around (RBWA)

The fourth component of the data collection process was termed "research by wandering around." Researchers observed the school in operation and noted those things that attracted their attention. This

naturalistic approach helped the researchers develop a sense of the school climate and operations and interactions that could be used in concert with the data gathered through other means.

G. The School Effectiveness Inventory (SEI)

The SEI was created by the investigators to collect information about the school community's (teachers, students, community members) curricular priorities or expectations and their perceptions of current school performance in those areas. In this study, the survey served two purposes--the creation of data that could be used (1) in school selection and (2) in characterizing the school.

The SEI was developed to evaluate perceptions regarding 16 academic, work-related, and personal student outcomes. The six academic outcomes evaluated included the following items: [Students should be able to:] (1) Read and comprehend effectively, (2) Write effectively, (3) Perform mathematical calculations effectively, (4) Speak effectively, (5) Listen effectively, and (6) Think critically. The five work-related outcomes evaluated included the following items: [Students should be able to:] (1) Follow tasks to completion, (2) Produce quality work, (3) Work well under supervision, (4) Contribute ideas or offer solutions, and (5) Possess ability to get along with others. The five personal outcomes evaluated included the following items: [Students should be able to:] (1) Participate in community activities, (2) Practice ethical/moral behavior, (3) Maintain physical health, (4) Participate in the Arts and related activities, and (5) Exhibit good grooming and dress appropriately.

Completion of the SEI was a two-step procedure (see Appendix A). Using a five-point Likert-type scale, participants indicated first each outcome's importance (***expectation*** data), and second, how well these outcomes were being addressed in their school (***perceived performance*** data) (see Appendix F, and Appendix G) (see Bobbett, French, & Henry, 1990b).

Expressed as a simple mathematical formula, people's expectations for their schools minus their perceptions of how well their schools are meeting those expectations equals a dissonance or dissatisfaction factor. The dissonance factor was used extensively in analyzing SEI data. (See Bobbett, French, & Henry, 1990a.). Thus,

Expectation - Perceived Performance = Dissonance
(EX - PP = DI)

H. Comparison with Other Research Findings

Once the characteristics of the six schools studied were identified, it was necessary to compare them with characteristics of other "exemplary" schools to determine similarities/differences and some measure of relative "goodness."

The sixteen composite indicators of goodness provide one such benchmark against which to balance the findings from this study. In addition, the findings from the Forty Rural Schools study and the Kansas Small School study provide additional benchmarks against which to compare the findings from this study.

V. DATA ANALYSES

All of the data collected were analyzed as unique sets of data, i.e., the SEI, interview, SCCI, LOC, and RBWA data were analyzed as separate entities. After this analysis was accomplished, the data were combined by the researchers to develop as full a depiction (based on all data sources) of the six schools in the study as possible. The combined data are reported as findings from the study; however, all separate analyses are presented in the appendices. Findings derived from the integration of the several data sources were then compared with the sixteen composite indicators of goodness and the findings from the Forty Rural Schools study and the Kansas Small School study.

VI. FINDINGS

The findings from this research fall into four broad categories: (1) Findings related to school climate; (2) Findings related to outcome orientation; (3) Findings related to administrative structures; and (4) Findings related to the sixteen composite indicators of goodness and the Forty Rural Schools and the Kansas Small Schools studies' findings that include: a) Similarities, partial similarities, and differences between the six rural Appalachian schools and sixteen composite indicators of goodness, b) Partial similarities and differences between the rural Appalachian school study and findings of the Forty Rural Schools and Kansas Small Schools studies, and c) Findings not addressed. Seven findings are related to school climate, six to outcome orientation, one to administrative structures, and three findings related to the similarities and differences between the sixteen composite indicators of goodness, the Forty Rural Schools, and Kansas Small Schools studies and this study. Each is presented below under its broad classification, and the source of the data related to the finding is noted in parentheses (when not otherwise noted) after the discussion pertaining to it.

A. SCHOOL CLIMATE

1. These schools are orderly, pleasant places.

In one school, a researcher observed students gathering in a commons area below an overhanging balcony prior to the beginning of the school day. As the bell sounded signaling the students to go to their first-period class, many moved to the second-floor balcony to observe students still entering the building and to talk some

more before classes began; however, about two minutes before the bell sounded for the beginning of the class, the balcony was empty. No adult staff member was evident on the balcony, and no one told the students to move on to class. They simply did (RBWA). One teacher reflected on this phenomenon, "We have no hall duty. The students know what is expected of them and have a real sense of pride in doing it" (IQ 5). Another teacher responded this way: "The students know what they can do from day one" (IQ 7).

SCCI Area IV (items 16-19, 38, 45) is related to the concept that good schools consider discipline to be a set of learned attitudes and behaviors and that students are taught these attitudes and behaviors through school norms. The SCCI area mean score (M=4.21) reflected high ratings for those items pertaining to this concept (see Appendix H). The mean for this area was the highest ranked area mean compared to means for the other seven areas of the SCCI.

The mean score for area IV (M=4.21) was +1.61 standard deviations (SD) above the overall mean score (M=3.93) for all areas. All six schools in the study had means for this area of the SCCI above the overall mean of areas, but this attribute was much more prevalent in one Tennessee school (+1.95 SD) than was the case for the other five schools. Only one other school had a mean (+0.32 SD) above the area mean, and four schools had means below the area mean. Responses were distributed in a range of -1.22 SD to + 1.95 SD around the area mean.

Analyses of individual items on the SCCI also support this finding. Item 35 on the instrument states, "The school is attractive and inviting." The item mean score (M=4.25) suggested that these schools are indeed pleasant places for students, teachers, and administrators to work. Item 16 states, "Rules and expectations are clearly defined, stated, and communicated so that people know what to do." The mean score for this item was 4.26, illustrating that the norms of school behavior were well established. Item 27 states, "People assist one another in ways that help them to become independent." The item mean score (M=4.09) illustrated that the notion of proper behavior is shared and becomes an individual responsibility. Item 37 states, "Students take responsibility for enforcing agreed upon patterns of relationships with other students, teachers, and administrators." The item mean score (M=3.51) suggested that these schools operate to a relatively high degree on independent, norm-driven behavior. A business teacher stated the case this way: "Peers in the small school can be more efficient than the administration" in communicating expected norms of behavior (IQ 5).

2. These schools are characterized by purposeful activity.

Although to different degrees and through different methods, these six schools are places within which purposeful activity is taking place. Student behaviors suggest that even though students consider school a

fun place, they want something more meaningful to happen there. One researcher overheard two students in conversation as they moved from the parking lot to the school building one morning prior to the beginning of the school day. Even though both of the school's basketball teams had played in the regional tournament the evening before, this conversation was about an English paper due that day (RBWA).

One interview question asked staff members what factors they felt contributed to their effectiveness (IQ 7). Analysis of the responses to this question supports the finding that purposeful activity in these schools is driven by student expectations. About 5% of the total responses to this question were coded in categories suggesting that students felt a need to succeed, valued education, and presented no discipline problems. An English teacher summarized this finding: "Kids at this school feel that academics are important" (IQ 6).

Students in these schools, although typical teenagers in many respects, exemplified the notion that schools were places of business. Researchers noted on several occasions the order and purpose of students in such areas as hallways, between classes, libraries, and the cafeteria. In addition, visits to individual classrooms revealed students engaged in learning activities, and students seldom were noted off-task. It was also obvious to the researchers that intrusions on academic time were intentionally limited by the school principals and the teachers (RBWA).

SCCI Area V (items 20-23) develops the canon that faculty in good schools seek and utilize curricula and instructional methods designed to reach all their students. The area mean score (M=4.24) indicated that the faculty in these schools were dedicated to the purpose of finding and implementing instructional methods to effect positive results with their students. This was the second highest ranking mean (+1.30 SD in relation to the overall mean of SCCI areas) for all SCCI areas. Three of the six schools had means for this area over 4.0, and only two had means below the overall mean. The range of the school means was -1.35 SD to +1.23 SD, again suggesting that this attribute received different emphasis within each school.

3. A caring attitude is generally found in these schools.

Personnel in these schools demonstrated a caring attitude about others within the organization. At one site, two cafeteria workers were observed emptying a full garbage can into an empty one. The workers informed the principal that a student had told them that she had just gotten a retainer the day before and feared that she had tossed it out with her lunch refuse. The workers were digging through the garbage in an effort to find the student's retainer (RBWA).

Nearly 11% of the responses to IQ 7, "What factors do you feel contribute to your excellence?" dealt with the caring attitude of teachers for students. A health and physical education teacher stated it this way:

"I feel that we are compassionate" (IQ 3). A fine arts teacher responded, "If you convey caring to kids, you will get a good response" (IQ 5).

SCCI data support this finding, too. SCCI Area III (items 10-15, 40, 41) develops the assumption that staff in good schools make students feel that they belong and are well served by the school The area mean score (M=3.82 of a possible 5.0, but -0.93 SD in relation to the overall mean of areas) suggested that the faculty in these six schools see themselves as functioning to make students feel that they are cared for. The relationship to the overall mean for all areas suggested that this area received relatively less emphasis than other SCCI areas, but the mean is nevertheless positive. Three of the schools had means in excess of the mean for the area, and three schools had less than the area mean. The range of the means for the schools was -1.09 SD to +1.53 SD, indicating that the relative emphasis placed on this area is not consistent among the six schools.

Individual means of other SCCI items also contribute to this finding. SCCI item 15 states, "Teachers know the names of their students, not only those in their classrooms but others in the school." The item mean score (M=4.41) suggested that teachers in these schools attempt to get to know the students in the school. SCCI item 39 states, "Teachers know and respect the students' languages, cultures, and individual styles." The item mean (M=4.21) illustrated that the teachers in these schools respect students and allow them to express themselves as individuals. SCCI item 40 states, "Each student has a definite contact, preferably an advocate, on the faculty." The item mean (M=3.46), although lower than many other means for items on the survey, indicated that students do have caring contacts on the faculty of these schools.

4. There is some concern for student and community involvement in these schools.

While there is some evidence of attempts to promote student involvement in the community and community involvement in the schools, data are somewhat conflicting. The definition one gives to involvement is clearly a factor in interpreting the level of emphasis given to this area.

Extra curricular activities are important in these schools. The athletic tradition in five of the six schools is storied. In the sixth school, that tradition is in the formative state. Three of the six schools had won district championships in football in the fall, and four of the six had sent basketball teams to the regional championship tournaments (RBWA). Athletics are not viewed as ends in themselves, however. One principal noted, "Show me a school with a good football team, and I will show you a school with good academics" (IQ 8). His point was that athletics support and add to the curricular program by developing expectations for success. A mathematics teacher who also doubled as the boys' basketball coach

proudly pointed out the fact that the valedictorian and salutatorian for the past three years had been members of either the boys' or girls' basketball team (RBWA). This same math teacher summarized his point thus: "Excellence in athletics helps develop excellence in academics because of the hard work associated with success" (IQ 7).

Community involvement is important to some degree in these schools. One principal noted, "We do everything we can to get community members into the school" (IQ 7). "We try to treat visitors like guests in our homes," offered a health and physical education teacher (IQ 7). Responses to IQ 7 revealed the impact of community support and involvement on these schools. Approximately 22% of the responses to this question cited community and parental support as key factors aiding the schools' success. An art teacher summarized this finding "Without the community involvement we get, our school would be a lot different" (IQ 7). A principal pointed to the fact that community involvement sets the tone for the school program by saying, "If it is not important to the community, you won't have a good school" (IQ 7).

Data from SCCI Area VIII (items 32-35) also pointed to this finding. This area offered the proposition that good schools' staff members relate well with parents and other community members in both school settings and in their homes and the community. The area mean score (M=3.96) indicated that parents and other community members are involved in the lives of these schools. Two other SCCI items are related to this finding. Item 28 ("Staff members know the neighborhood, the street names, the stores, and the places of entertainment where their students live" [M=4.33]) and item 31 ("Staff and administrators frequently participate in groups, institutions, and organizations within the community that can offer support to students and to the school, e.g., churches, clubs" [M=4.23]) had means above 4.0. In addition, item 13 is directly related to this finding and states, "All students are actively included in classroom and school activities, regardless of sex, race, religion, socio-economic status or academic ability." The item mean score (M=4.39) indicated that all groups within the student population were actively included in school activities.

SCCI area VIII (+0.12 SD above the overall mean of areas) ranked fourth among the eight areas of the index. This ranking suggests that of the eight areas measured by the SCCI, this concept receives moderate emphasis in these six schools. Individual schools placed varying degrees of emphasis on this area ranging from -1.54 SD to +1.44 SD in comparison to the area mean.

Responses to item 29, "School faculty members visit students' homes" (M=2.54) seemed to contradict this finding; however, these data must be viewed in the context of the rural Appalachian school. Often, students' homes are remote from the school, and roads are not consistent or well-marked in many areas. Teachers may feel (rightly or wrongly) that parents of many students would not feel comfortable hosting

them in their homes due to the fact that many students come from homes with incomes far below poverty levels.

Some evidence of community and parental involvement and support was present in these schools. One school had a computer lab installed and purchased with funds from a community organization (RBWA). Another school had a day-care center that was the result of community input and expression of need (RBWA). In one school, a parent (also a school board member) worked as an office volunteer two days a week (RBWA). Still another school proudly displayed its new weight training facility and locker rooms that were paid for and built by parent and community volunteers (RBWA).

Data from the SEI are somewhat contradictory to some other data. When the SEI 16 educational outcomes were evaluated, the participant groups (students, teachers, community members, or by state) did not value participation in community activities (SEI 12) highly. It received the second smallest mean score (M=3.85) (one of two educational outcomes below a mean expectation score of a four) and the second from the bottom ranking (15th).

5. These schools celebrate the achievements of students, teachers, and other supporters.

Athletic achievements are consistently celebrated. One school proudly displays a sign at its entrance proclaiming its numerous state football championships. Upon entering this school, one is met by trophy cases filled with awards for the athletic accomplishments of its students. This school also has a hall of fame that honors the athletic accomplishments of individuals in a dignified presentation. However several of the schools highlighted other achievements as well. In one school, athletic and academic awards are displayed side by side. A third school displayed athletic trophies in cases on either side of its entrance, while pictures and short biographies of students who made all A's during the previous semester are displayed on the wall facing the entrance. Another school had a hall of fame that honored students, teachers, parents, and community members for contributions to the school in addition to the collection of athletic trophies located in another part of the building (RBWA).

Two items on the SCCI are related to this finding. Item 10 states, "Many students are involved in the school's activities--in planning and in implementing. Participation is high and widely distributed." The item mean score (M=3.57) indicated that teachers perceived that students were involved in a substantial variety of school activities. Item 12 states, "Students' work is displayed in classrooms, display cases, corridors, and cafeteria." The item mean score (M=3.90) indicated that these schools perceived themselves as seeking ways to celebrate the good work of students. However, mean scores for SCCI items in this area are not as high as mean scores for other items previously discussed.

6. Teachers in these schools are highly committed individuals.

"There are a lot of people here who really work hard, and that rubs off on you," declared a math teacher (IQ 5). A principal, emphasizing the dedication of his faculty proclaimed, "By golly, my group could teach in a barn" (IQ 7). Responses to IQ 7, that asked for factors related to the schools' effectiveness, indicate that teachers are seen as the key ingredient in making these schools work. Seventy-four responses (26%) were coded in the broad category having to do with the instructional staff. Of these, fifty responses (17%) reflected the commitment of teachers to the school and their jobs. An English teacher recounted, "The faculty are the core of the whole process" (IQ 7).

SCCI data also support this finding. SCCI item two states, "Problems do not fester; they are identified and resolved. The question, `What can we do?' replaces the sentiment, `It can't be done.'" The item mean score (M=3.90) indicated that the faculty in these schools are dedicated to identifying and dealing cooperatively with problems. SCCI item three states, "Nearly all members feel that the school belongs to them, and that he or she can make a difference in it." The item mean score (M=3.97) illustrated ownership by the faculty and dedication to the organization. SCCI item nine states, "Responsibility and `territories' are shared and respected; people are not possessive nor are they fearful that someone will `take over' their job, space, or materials. They say `our school' and `our students,' not `mine.'" The item mean score (M=3.93) depicted the idea that ownership of the school, although felt individually, is shared.

LOC data also contribute to this finding. Area II of the LOC, Motivation (items 4-6) (M=3.06), is the highest ranking area on the instrument among the six schools (+1.06 above the overall mean of areas) (see Appendix I). Four of the six schools had means above the area mean, while two had means below the area mean. The range of means among the six schools in relation to the area mean was between -1.14 SD and +1.38 SD, suggesting that motivation varies among the six schools in the study.

B. OUTCOME ORIENTATION

7. Personal development of students is a primary orientation of these schools. Academic development may not be as strong a focus.

One principal offered this observation: "When we teach, we tend to teach the subject. That is a mistake. We need to teach the kid" (IQ 1). Responses to several interview questions support this finding. Interview question one asked respondents. "Should a high school education focus more on developing individual potential or on preparation for life after high school?" Only five responses (4%) indicated that a high school education should focus on developing individual potential, yet only 29 (24%) indicated that preparation for life after high school should be the focus. Eighty-five responses (71%) indicated that both

development of individual potential and preparation for life after high school should be dual focuses. Indeed, 57 responses (40%) indicated that the two were so intertwined that they could not be pursued separately (IQ 2). A principal offered this synopsis: "You have to focus on the individual to really know how to prepare him for the future" (IQ 1). A social studies teacher stated, "Individual potential has everything to do with how they (students) will achieve after high school" (IQ 1).

This finding was also supported by responses to IQ 3, "Does your school have a unique mission other than the general mission of the American high school?" Over 82% of the responses to this question indicated that these schools had a unique mission beyond the general mission of the American high school. Further analysis reveals that nearly 59% of these responses indicate that the uniqueness of the mission of these schools has to do with the personal development of their students. Twenty-four responses (23%) were related to helping students see alternatives to and how to improve their lifestyle. A social studies teacher summarized this idea when he said, "We are unique in the sense that we are in an economically and educationally poor area" (IQ 3).

Responses to IQ 4 ("Does your school have specific goals to support its mission" What are they?") also support this finding. Goals were disbursed over the areas of general goals, socialization goals, personal development goals, academic goals, and vocational goals; the area with the most citations (61, accounting for 59% of the total) was personal development. An English teacher stated, "Sometimes we have to convince our students that they are good enough to compete with students from other schools" (IQ 4).

Two SCCI items support this finding. Item six states, "Status differences that imply inferiority or superiority of one staff or student group over another are eliminated." The item mean score ($\underline{M}$=3.8) signified that individual differences are accepted and built upon in these schools. SCCI item 26 states, "Individual and cultural differences are respected and valued and are openly expressed in the school." The item mean score $\underline{M}$=4.22) indicated that individual identity is highly valued in these schools.

The SEI instrument contained three orientations (academic, work-related, and personal). Data from this instrument were somewhat contradictory internally as well as to other data reported. The SEI mean expectation data for personal outcomes was the lowest ($\underline{M}$=4.2) for the three outcome orientations, while academic ($\underline{M}$=4.5) and work-related ($\underline{M}$=4.4) outcomes received higher mean expectation scores (see Appendix J). Further, the two lowest expectation mean scores and rankings for the 16 outcomes were in the personal outcome area (community activity [($\underline{M}$=3.85, 15th] and arts [($\underline{M}$=3.74, 16th]). (Bobbett (1991) noted that students' musical independence in Appalachian schools was low and congruent to the arts expectation measured by the SEI). Personal area mean rank ($\underline{M}$=11.0) was lower than the academic ($\underline{M}$=7.5) or work-related ($\underline{M}$=7.2) mean rank.

There were other conflicting data when reviewing the SEI responses of various participant groups. Grooming was ranked high by students (4th), but teachers and community members ranked it 14th. Ethics/morals was ranked low by students (11th) but high by teachers (2nd) and community members (5th). Both of these outcomes are in the Personal area/orientation.

When mean ranks for the three orientations were evaluated, academic orientation (M=4.83) was much higher than either the work-related (M=10.00) or personal (M=11.40) orientations.

8. Formal goals and operational goals in these schools appear not to be congruent; and goals differ somewhat from constituency to constituency.

There is a lack of congruency between formal and operational goals in these schools, and the goals seen as important by various constituencies. However, operational goals appear to be widely shared among educators. During the interviews, the researchers noted that the formal, written goals of the school were often referenced in somewhat negative terms. One principal reflected this oddity: "Sometimes we write things down that we don't really mean" (IQ 4). An English teacher stated her beliefs about school goals this way: "It's the unwritten goals that are important here" (IQ 4). Another principal summarized, "Goals are displayed in every room, but they're just words. Our actions communicate more than words" (IQ 5).

"We all share a sense of purpose," pronounced an English teacher (IQ 6). SCCI item one ("A sense of direction and mutual purpose is shared among many staff, students, and, to some extent, parents. [They can describe some goals and achievements in specific, understandable terms]") supports this finding. The item mean score (M=4.13) indicated that respondents believe that their schools' purposes are mutually shared among those involved in the enterprise.

Responses to LOC Area V, Goals (items 14 and 15) provide limited support for this finding. The area mean score (M=2.99) indicated that these schools border on the Likert System 3 definition. Individual item analyses within this area reveal that the mean score for item 14 (M=2.88, "How are organizational goals established?") indicates that organization members can give some input to goal establishment, but that the goals are ultimately established by orders from upper organizational levels. The mean score for item 15 (M=3.09) ("How much covert resistance to goals is present?") indicated that some covert resistance to the organization's formal goals is present at times.

Fourteen of the sixteen SEI mean expectation scores were above 4.0. The two outcomes rated below four in importance were arts (M=3.74) and community activities (M=3.85). Students, teachers, and community members have different goals (see Appendix J). Students were significantly different from teachers in rating the importance of all six academic outcomes, four work-related outcomes, and one

personal outcome. Students were significantly different from community members in their ratings of one academic outcome (math), and two personal outcomes (ethics/morals, grooming). Teachers were significantly different from community members for three academic outcomes (write, listen, critical thinking) and one personal outcomes (arts). Finally, Kentucky and Tennessee participant groups were significantly different for 9 of the 16 outcomes: all academic outcomes except for speaking, one work-related outcome (ideas), and three personal outcomes (community activities, physical health, arts). However, when the rankings of the sixteen educational outcomes were reviewed, with few exceptions the participant groups ranked the skills similarly. When one participant group ranked a skill either high, medium, or low in importance, other participant groups had similar educational expectations. There were two exceptions: ethics/morals and grooming. Students ranked ethics/morals low (11th), but teachers and community members ranked it high (2nd)--a difference of nine rank positions. The students ranked grooming relatively high (4th), but the adults ranked it low (14th)--a difference of ten rank positions.

9. Both formal and informal communication mechanisms communicate mission, goals and expectations; however, communication with students in these areas is more informal than formal.

Communication of expectations is accomplished via two means, formal organizational mechanisms and informal interactions. Analysis of IQ 5 ("How have the school's mission and goals been communicated to teachers and students in this school?") indicates that formal organizational mechanisms for teachers include: (1) faculty/department/in-service meetings (11% of total citations); (2) committee and accreditation assignments (7% of total citations); (3) handbooks (5% of total citations); and formal group discussions (2% of total citations). Formal organizational mechanisms for students include: (1) handbooks (8%); (2) staff led assemblies (4%); and (3) reward systems (3%). Formal communications accounted for over 64% of the citations for teachers but just over 34% for students in terms of how the schools' mission and goals were communicated.

Informal communication also plays a role in conveying the mission and goals of these schools. For teachers, informal communication (either with other teachers or the principal) accounted for 36% of the citations. For students, informal communication (most often with teachers) accounted for 66% of the citations dealing with communication of the school's mission and goals.

Two SCCI items are directly related to this finding. Responses to SCCI item 41 ("Rules and other expectations are clearly defined, stated, and communicated so that people know what to do") support this finding. The item mean score ($\underline{M}$=4.23) indicated that expectations, whether in reference to rules of behavior or in reference to academic considerations, are known throughout these six schools. Item 45

states, "School rules are written and steps are taken to see that each pupil/parent/school faculty member, etc., know the rules, or has a copy of the rules (code of conduct)." The item mean score (M=4.62) indicated that written rules were present and emphasized. The mean rank of this item was third overall (out of 45) and was the top ranked item in four of the six schools.

10. Expectations are high in these schools.

"Sure we don't have the opportunities that schools in Lexington have, but we do the best or even more so with what we've got," declared a Kentucky social studies teacher (IQ 7). This statement reflects the competitive nature of the faculty of these schools: Another teacher summarized these expectations by evoking the school motto: "Our motto is 'Where excellence is a tradition'" (IQ 3). Principals also reflected high expectations. "When I work hard, I can ask a lot from everyone," stated one principal (IQ 8). Another principal stated his expectations thus: "We want the best for our kids" (IQ 3).

Nine percent of the responses to IQ 7 (factors relating to school effectiveness) were coded in relation to high expectations. A math teacher reiterated this idea, "When you expect success, that's what you'll get" (IQ 7). A health and physical education teacher stated "The community wants and expects quality education. Because their expectations are high, ours are too" (IQ 7).

High expectations also can be seen in responses to the SEI. Respondents from both Kentucky and Tennessee rated 14 of the 16 items above 4 in importance on the five-point scale. Only two items, participates in community activities and maintains physical health were considered to be mid-range in importance, and both of these items received mean ratings above 3.7.

Although 14 of 16 SEI mean expectation scores are higher than 4.0, all 16 mean performance scores were below 4.0. Therefore, people believe they can do better in all areas. They hold high expectations for themselves.

11. Perceptions of communication processes and participation in them vary in these schools.

Area III (Communication) of the LOC was -0.41 SD compared to the mean of all LOC areas (see Appendix L). Four of the six schools had means above, and two had means below the area mean. The range of area means for individual schools was -1.57 SD to +1.43 SD.

Communication as defined by the LOC received a mean rating of 2.95, indicating that it is most representative of System 2, but bordering on System 3. Item seven asked, "What is the usual direction of information flow?" The mean score for this item was 2.86, indicating the flow of information in these

schools is more downward than upward. Item eight asked, "How is downward communication accepted?" The mean score for this item was 3.43, indicating the faculty and students in these six schools accept downward communication with caution. Item nine asked, "How accurate is upward communication?" The item mean score (M=3.05) indicated that information moving upward in the organization was perceived as "Often accurate." Item ten asked, "How well do superiors know problems faced by subordinates?" The item mean score (M=2.46) suggested that subordinates do not believe that their superiors fully know the problems they face.

The SCCI item 25 ("If a person has a problem with another, he or she discusses it directly with that person.") mean (M=3.58) indicated that in these schools, there was some truth to this statement. The patterns of responses suggest that communication is perceived to flow from administration downward more often than from students and faculty upward, but that upward communication is often accurate and that administrators do have limited understanding of the needs of those below them in the organization.

12. Success is monitored through various means in these schools; monitoring appears to be vertical rather than horizontal, and designs for focusing program evaluation do not appear to be prominent.

These schools use various means to monitor their success in relation to their mission and goals. Success is measured through both formal and informal channels. IQ 6 ("Does your school have a process for evaluating its success in relation to its missions/goals? [If yes, please explain]") is directly related to this finding. The broad coding categories for responses to this question were: (1) formal, traditional measures (accounting for 39% of the total citations); (2) formal evaluation activities (accounting for 24% of the total citations); (3) formal planning activities (accounting for 10% of the total citations); and (4) informal mechanisms (accounting for 27% of the total citations).

Of the formal means of evaluation, test scores (25 citations, 13% of total citations); students going on to postsecondary education (19 citations, 10% of total citations); accreditation activities (14 citations, 7% of total citations); formal follow-up with graduates (12 citations, 6% of total citations); surveys of/feedback from community (12 citations, 6% of total citations); ACT scores (10 citations, 5% of total citations); and dropout rate (10 citations, 5% of total citations) were most often mentioned.

Respondents perceived that informal evaluation methods often were utilized to infer success in these schools. Of the 53 citations (27% of total citations) citing informal methods, 31 (16% of total citations) were coded as informal follow-up with graduates, and 13 (7% of total citations) were coded as observation of individual students.

Responses to SCCI item seven ("Each person accepts criticism from those who receive his/her

services") support this finding. The item mean score (M=3.79) indicated that the faculty in these schools accept criticism as a basis for improvement.

Responses to LOC Area VI, (Control, items 16-18) also support thi.. finding. The mean score for this area of the LOC was 3.06 (+0.89 SD in relation to the mean of all areas), and of the six areas on the LOC, the mean for Control ranked second. Four of the six schools had means in excess of the area mean; however, two schools had means below the area mean. The range of means for this area were between -1.39 SD and +1.59 SD. These data indicate that control data were used in widely different ways in these six schools.

Individual item means were also supportive of this finding. Item 16 asked, "How concentrated are review and control functions?" The item mean score (M=2.8) indicated that respondents perceived control and review functions to be more associated with top organizational levels than with lower levels. Item 18 asked, "What are cost, productivity, and other control data used for?" The item mean score (M=3.17) indicated that these data in these organizations are perceived as bases for reward and some self-guidance, but not for solving school or program problems.

C. FINDINGS RELATED TO ADMINISTRATIVE STRUCTURES

13. Administrator authoritarianism and involvement of teachers in decision-making are viewed very differently from school to school. Principal leadership generally is viewed as important and positive, but as somewhat autocratic.

"He's a loose-tight administrator" (IQ 8) was the description one teacher gave of his principal. This principal was tight in his expectations--he expected every staff member to push for high goals, but he was loose in his use of authority--he allowed staff members the freedom to use whatever methods they felt were best to accomplish their tasks.

Interview question eight asked respondents, "How does your principal exercise his/her role as leader of the school? What types of things does he/she do that contribute to the success of the school?" Forty-one responses (14%) to this question indicated that the principals of these schools were not authoritarian in their approaches. An English teacher offered, "He allows teachers to be creative" (IQ 8).

Involvement of faculty, students, and support staff in decision-making varies. An art teacher proposed, "Whether we agree or disagree, we can fight it out and reach a compromise" (IQ 8). Sixty-eight responses (23% of total citations) to interview question eight indicated that the principals of these six schools sought teachers opinions, shared decision-making authority, and implemented teachers' ideas. "He makes everyone feel a part of decision-making," recounted a guidance counselor (IQ 8).

SCCI data paint a somewhat different picture, however. Area II of the SCCI (items 6-9, 41-42, 44)

develops the idea that staff in good schools are involved in decision-making and eliminate status barriers that inhibit communication. The area mean score (M=3.83) indicated that this precept is perceived to be operating to some degree in the study. The mean for this area was -0.61 SD in comparison to the mean for all areas, suggesting that involvement in decision-making received less emphasis than did other areas measured by the instrument. Four of the six schools had means below, and two had means above the area mean. The range of means for the six schools was between -1.33 SD and +1.55 SD in relation to the area mean.

LOC responses were also contradictory. Area IV, (Decisions, items 11-13) relates to the decision-making process in the organization. The mean for this area of the LOC was 2.73 (-1.89 SD in relation to the overall mean of areas), and it ranked sixth among all LOC areas. Means for the six schools revealed wide variance in perceptions of decision-making, ranging from 2.25 (-1.66 SD in relation to the area mean) to 3.25 (+1.40 SD in relation to the area mean).

Individual LOC item analyses indicate some shared decision-making may be taking place in these schools; however, item 11 ("At what level are decisions made?") (M=2.34) indicated that policy decisions are made at top organizational levels with some delegation. This ranking places these schools within the System 2 definition (autocratic with limited participation) for this characteristic. Item 12 ("Are subordinates involved in decisions that related to their work?") (M=2.72) indicated that faculty are occasionally consulted about decisions that relate to their work, and that these schools fall within the System 2 definition for this item. Item 13 ("What does the decision-making process contribute to motivation?") (M=3.13) (System 3--democratic organization) indicated that the current decision-making process develops some motivation among the faculty.

The idea that "you can't be any better than your leadership" (IQ 8) permeates these schools. Sixty-six responses (23% of total citations) were coded in relation to the principal as instructional leader. Among all the responsibilities of the principal, this was by far the most important as revealed by the interview analysis. Said one teacher, "If you don't have a strong principal, you can't have an excellent school" (IQ 8).

LOC Area I, (Leadership, items 1-3) also speaks to this finding. The mean for this area of the LOC was 2.95 (-0.19 SD in relation to the overall mean of areas). The mean of three schools was above, and the mean of three schools was below the mean for this area. The range of means among the six schools was between -1.45 SD and +1.32 SD, indicating that perceptions of leadership were varied in these schools.

Individual item analyses provide a clearer picture of the leadership of the principals in these schools. Item one asks, "How much confidence and trust is shown in subordinates?" The item mean (M=3.15)

indicated that a substantial amount of trust was exhibited by the principals in these six schools. Item two asks, "How free do they feel to talk to superiors about their job?" The item mean (M=2.97) indicated that teachers in these schools feel somewhat free to engage their principals in dialogue about their jobs. Item three asks, "How often are subordinates' ideas sought and used constructively?" The item mean (M=2.72) indicated that teachers felt that their ideas were sometimes sought and used in these schools.

D. FINDINGS RELATED TO OTHER RESEARCH.

14. There are similarities, partial similarities, and differences among the six schools in this study and the sixteen composite indicators of goodness.

A comparison of this study's thirteen findings and the sixteen composite indicators of goodness is revealing. Seven characteristics from the sixteen indicators are similar to findings developed via the multiple data source portrayal from this study. Five characteristics from the sixteen indicators are partially similar to findings developed in this study, while two characteristics are different (Figure 4).

15. There are partial similarities and differences among the six schools in this study and the schools in the Forty Rural Schools and the Kansas Small Schools studies.

Three findings from the Forty Rural Schools study were partially similar to findings from this study, while eight findings from this study differed from the findings of the Forty Rural Schools study. Four of the lowest rated indicators of effectiveness in the Kansas Small Schools study were countered by findings from this study (Figure 5).

16. There are attributes not commonly addressed in the findings from this study and the various studies.

Four of the sixteen indicators of goodness were not addressed by findings from this study. Additionally, five findings from the Forty Rural Schools study were not addressed by findings from this study, and one of the lowest rated indicators of effectiveness from the Kansas Small School study was not addressed by findings from this study (Figure 6).

GOOD SCHOOLS Findings		Related Study Findings
	SIMILAR	
1.	Have a safe, orderly climate.	1, 2
2.	Have positive, caring relations with students.	3
3.	Have positive relations with outside constituencies.	4
4.	Have clear standards of conduct.	1, 2, 9
9.	Have good human relations.	3, 5
16.	Use positive reinforcement.	5,
	PARTIALLY SIMILAR	
5.	Have a clear mission and goals.	7, 8, 9
6.	Have a shared sense of purpose.	7, 8, 9
7.	Engage in regular evaluation of students and school programs.	12
8.	Have strong instructional leadership.	13
	DIFFERENT	
10.	Utilize shared decision-making	11, 13
11.	Promote teacher autonomy and continuous growth and renewal.	13

Figure 4 Study findings compared to the sixteen composite indicators of goodness.

Forty Rural Schools findings	Related Study Findings
SIMILAR	
9. Had more authoritarian leadership.	11, 13
10. Had less involvement of others in decision-making.	13
DIFFERENT	
1. Reflected more traditional educational values.	7, 8
2. Received less community support.	4
3. Reflected lower levels of commitment from faculty and students.	6
8. Held lower academic expectations.	10
11. Had lower levels of cooperation.	3
13. Reflected less concern for others than do schools in general.	3

Kansas Small Schools study's lowest rated indicators of effectiveness	Related Study Findings
DIFFERENT	
2. Parents feel involved and have a feeling of belonging to an educational partnership.	4, 5
3. Schools provide emotional support.	3, 5
4. Schools prepare students for the world of work.	7
5. Principals provide strong instructional leadership.	13

Figure 5 Study findings compared to Forty Rural Schools and Kansas Small Schools studies

SIXTEEN COMPOSITE INDICATORS OF GOODNESS

Good Schools

12. Emphasize effective instruction.
13. Utilize variety in instruction.
14. Use facilities and resources effectively.
15. Promote independent learning.

Forty Rural Schools

3. Had fewer resources with which to work.
5. Attained fewer of their goals.
6. Focused less on critical thinking.
7. Used less variety in instruction and focused more on textbook.
12. Recognized good work less frequently.

Kansas Small Schools Study (***Lowest Rated Indicators of Effectiveness***)

1. Students have good work ethic.

Figure 6 Findings not addressed in this study

VII. CONCLUSIONS

1. If the sixteen composite indicators of goodness truly characterize good schools, the six schools investigated in this study meet most, but not all of the indicators.

The findings of this study indicate that the six schools studied have characteristics that are either similar or partially similar to ten of the sixteen indicators. The schools differed from two of the indicators, and four indicators were not addressed in the findings of this study. There is a partial match between the sixteen composite indicators of goodness and the findings from this study, but the match is not perfect.

2. If the findings from the Forty Rural Schools and the Kansas Small Schools studies truly characterize small, rural schools, the six schools investigated in this study do not clearly fit the small, rural school mold.

The findings from this study matched only two of the thirteen findings from the Forty Rural Schools study and none of the five lowest rated indicators of effectiveness from the Kansas small schools study. Five of the findings from the Forty Rural Schools study and one of the lowest rated indicators of goodness from the Kansas Small Schools study were not addressed by the findings of this study. The six schools in this study do not match the descriptions of small, rural schools in the other two studies.

3. Several features/characteristics of these rural Appalachian schools are worthy of study and replication by schools everywhere.

These six schools were initially selected as "good" schools within their Appalachian context. The investigators found that they were pleasant, orderly places, characterized by purposeful activity, caring attitudes, committed teachers, high expectations, and dissatisfaction with current school performance in a number of areas. It is growing increasingly difficult to find several of these characteristics in schools. Perhaps personnel in other schools could learn something from interactions with these schools.

4. The organizational structures of these schools can best be described as autocratic with some delegation.

The LOC data, some SCCI data, and some interview data support this conclusion. However, it is not clear how this structure may contribute to "goodness" of the schools or how it may keep the schools from becoming better. It is also not clear what roles teacher expectations for organizational structure and the actual structure of the organization play in the development of "goodness."

VI. RECOMMENDATIONS FOR FURTHER STUDY

Based on the findings and conclusions of this study, the researchers recommend that the following questions be investigated:

1. How can the variety of instruments and procedures used in this study be refined and better used to study school effectiveness?

The SEI was created for use in this study. The other instruments and procedures used were selected because they appeared to be capable of providing comprehensive information about schools. The researchers still believe this proposition to be true, but they also believe that refinements can be made which will generate more useful and more powerful data.

2. How can the concept of good schools/effective schools best be defined and applied in the Appalachian setting?

This study has provided some insight into the characteristics of six, carefully selected Appalachian high schools, but the question of what constitutes a good/effective Appalachian high school still remains. Should "goodness" be defined for these schools in the same way it is defined for others? What contextual features should be taken into account in the definition of a good Appalachian school?

3. How similar are the features of Appalachian high schools?

This study focused on six schools. Are they similar to or different from other Appalachian high schools, and if so, to what degree? This study should be extended.

4. What roles do leadership expectations and perceived operational leadership play in "good" schools?

The findings from this study revealed that these schools were characterized by somewhat autocratic leadership with some delegation, but when interviewed, teachers spoke of their principals in highly positive terms. The question arises, "What do teachers expect in terms of leadership style?" Additionally, in an era in which shared decision-making is being mandated by legislatures, the question also follows, "How important is it that leaders shape teachers' expectations for a leadership style that shares decision-making authority and accountability?"

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APPENDIX A

SCHOOL EFFECTIVENESS INVENTORY

The following survey is part of a research project to identify excellent high schools in the Appalachian regions of Kentucky and Tennessee. Your responses to the items in this survey will play a key role in the completion of this important research. Thank you for your participation.

Instructions

The following items are intended to determine what you feel is important for your high school to do and how well your high school is performing in relation to what you feel is important. Notice that there are two scales following each item on the survey. On the first scale **[A]** fill in the box that best fits your opinion as to the importance of the item. On the second scale **[B]** fill in the box that best fits your opinion as to how well your high school is performing in relation to the item.

Items		***Students should be able to:***	**A** **Personal Importance** Least → Most 1 2 3 4 5	**B** **Local High School** Poor → Excellent 1 2 3 4 5
Academic	1.	Read and comprehend effectively	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	2.	Write effectively	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	3.	Handle mathematical calculations effectively	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	4.	Speak effectively	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	5.	Listen effectively	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	6.	Think critically	○ ○ ○ ○ ○	○ ○ ○ ○ ○
Work	7.	Follow tasks to completion	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	8.	Produce quality work	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	9.	Work well under supervision	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	10.	Contribute ideas or offer solutions	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	11.	Possess ability to get along with others	○ ○ ○ ○ ○	○ ○ ○ ○ ○
Personal	12.	Participate in community activities	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	13.	Practice ethical /moral behavior	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	14.	Maintain physical health	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	15.	Participate in the Arts and related activities	○ ○ ○ ○ ○	○ ○ ○ ○ ○
	16.	Exhibit good grooming and dress appropriately	○ ○ ○ ○ ○	○ ○ ○ ○ ○

If you would like to make further comments concerning your high school, please do so in the space below (use the back of the page if necessary).

Students

School	ID	N	X	Y	X-Y	RK	PT(15)
TN1		35	4.48	3.79	0.69	1	15.00
TN2		52	4.44	3.74	0.70	3.5	8.75
TN3	3	39	4.25	3.74	0.51	3.5	8.75
TN4		40	4.24	3.58	0.66	5	5.00
TN5	1	45	4.16	3.37	0.79	2	12.50
TN6		41	4.25	3.42	0.83	6	2.50
Total	**4.00**	**166**	**25.82**	**21.64**	**4.19**		
Mean	**0.67**	**41.50**	**4.30**	**3.61**	**0.70**		
KY1	9	37	4.00	3.23	0.77	4	7.50
KY2	10	28	4.08	3.41	0.67	2	12.50
KY3	2	46	4.35	3.93	0.44	1	15.00
KY4	7	16	4.18	3.46	0.72	3	10.00
KY5	1	50	4.39	3.58	0.82	5	5.00
KY6	2	40	4.18	3.31	0.87	6	2.50
Total	**31.00**	**217.00**	**25.18**	**20.91**	**4.28**		
Mean	**5.17**	**36.17**	**4.20**	**3.49**	**0.71**		

Teachers

ID	N	X	Y	X-Y	RK	PT(15)
2	22	4.57	3.43	1.15	3	10.00
5	27	4.41	3.26	1.15	6	7.50
5	42	4.56	3.50	1.06	1	15.00
3	59	4.56	3.48	1.07	2	12.50
2	32	4.40	3.19	1.20	4.5	5.00
	44	4.42	3.19	1.23	4.5	2.50
17.00	**226.00**	**26.92**	**13.67**	**4.43**		
2.83	**37.67**	**4.49**	**3.42**	**1.11**		
	27	4.56	3.38	1.18	4	7.50
1	27	4.60	2.84	1.77	6	2.50
1	13	4.48	3.69	0.79	1	10.00
4	6	4.24	3.38	0.86	3	12.50
1	27	4.44	3.61	0.83	2	15.00
	22	4.58	2.91	1.68	5	5.00
7.00	**122.00**	**26.90**	**19.80**	**7.11**		
1.17	**20.33**	**4.48**	**3.30**	**1.18**		

Community Members

	ID	N	X	Y	X-Y	RK	PT(20)
TN1	1	18	4.29	3.68	0.60	2	16.67
TN2		6	4.67	4.27	0.40	1	20.00
TN3		17	4.37	3.20	1.17	4	10.01
TN4	7	35	4.37	3.44	0.93	3	13.34
TN5	12	34	4.39	2.94	1.44	6	3.35
TN6		10	4.32	3.10	1.22	5	6.68
Total	**20**	**120**	**26.41**	**20.63**	**5.76**		
Mean	**3.3333**	**20**	**4.40**	**3.44**	**0.96**		
KY1		4	4.42	3.47	0.95	1	20.00
KY2	2	19	4.19	3.22	0.97	2	16.67
KY3	N/A	N/A	N/A	N/A	N/A	5.5	5.02
KY4	6	12	4.58	3.33	1.25	3	13.34
KY5	N/A	N/A	N/A	N/A	N/A	5.5	5.02
KY6		3	4.75	3.35	1.40	4	10.01
Total	**8**	**38**	**17.94**	**13.37**	**4.57**		
Mean	**2**	**9.5**	**4.49**	**3.34**	**1.14**		

School Attributes

CT	PT(5)	ACT	PT(10)	DR	PT(10)	PSS	PT(5)	GR	PT(10)
79.00	0.85	18.40	4.99	11.60	1.65	47.00	2.10	97.00	7.50
82.00	2.51	19.90	10.00	9.50	4.99	70.00	4.59	97.00	7.50
89.00	5.00	19.70	8.33	9.35	6.66	60.00	3.34	91.00	3.32
80.00	1.68	19.10	6.66	9.90	3.32	70.00	4.59	98.00	10.00
83.00	3.34	17.40	3.32	7.20	8.33	47.00	2.10	N/A	1.65
87.00	4.17	17.20	1.65	7.10	10.00	40.00	0.85	93.00	4.99
500.00	**17.55**	**111.70**	**34.95**	**54.65**	**34.95**	**334.00**	**17.57**	**476.00**	**34.96**
83.33	**2.92**	**18.62**	**5.83**	**9.11**	**5.83**	**55.67**	**2.93**	**95.20**	**5.83**
55.04	2.51	23.00	10.00	1.00	10.00	74.00	4.17	99.00	10.00
55.18	3.34	17.60	6.66	4.10	4.99	45.00	1.68	80.00	3.32
56.92	5.00	18.80	8.33	2.50	8.33	93.00	5.00	92.00	6.66
55.76	4.17	N/A	1.65	3.70	6.66	N/A	0.85	N/A	1.65
46.38	0.85	13.00	3.32	4.50	1.65	50.00	2.51	93.00	8.33
52.50	1.68	17.50	4.99	4.40	3.32	65.00	3.34	90.00	4.99
321.78	**17.55**	**89.90**	**34.95**	**20.20**	**34.95**	**327.00**	**17.55**	**454.00**	**34.95**
53.63	**2.93**	**17.98**	**5.83**	**3.37**	**5.83**	**65.40**	**2.93**	**90.80**	**5.83**

Incomplete Data (ID)
Number (N)
Expectation (X)
Performance (Y)
X minus Y (X-Y)
Points (PT)

Student Performance competency test (CT)
Assigned points (PT)
ACT score (ACT)
Drop out rate (DR)
Percentage of students going on to post-secondary school (PSS)
Graduation Rate (GR)
Total Points (TP)

* % passing both language/math of TN Basic Skills test.
** Weighted Mean score of KY Essential Skills (KEST)

APPENDIX B

SCHOOL CLIMATE AND CONTEXT INVENTORY[1]

We are seeking information about the climate of your school. We request your help through your voluntary completion of this inventory. All resulting data will be combined for analysis; therefore, no individual responses will be identified. You are free to withdraw your participation at any time.

Find response item A below. Darken the correct space to indicate your race:

A. (1) (2) (3) (4) (5) 1. American Indian 2. Asian 3. Black 4. Hispanic 5. White

Find response item B below. Darken the space that tells how many years you have been in this school, include this year.

B. (1) (2) (3) (4) (5) 1. year 2. years 3. years 4. years 5. (5 or more years)

DIRECTIONS: Darken a number to rate your school from 1 to 5. A rating of 1 shows that the statement is not true of your school. A rating of 5 means that the statement is very true of your school.

NOT TRUE TRUE

1. (1) (2) (3) (4) (5) A sense of direction and mutual purpose is shared among many staff, students, and (to some extent) parents. (They can describe some goals and achievements in specific, understandable terms).
2. (1) (2) (3) (4) (5) Problems do not fester; they are identified and resolved. The question, "What can we do?" replaces the sentiment, "It can't be done."
3. (1) (2) (3) (4) (5) Nearly all members feel that the school belongs to them, and that he or she can make a difference in it.
4. (1) (2) (3) (4) (5) A large number of the staff is involved in planning and implementing school activities. Participation is high and widely distributed.
5. (1) (2) (3) (4) (5) School staff members know how to prevent discipline problems caused by adults, by school procedures or by the school organization.
6. (1) (2) (3) (4) (5) Status differences that imply inferiority or superiority of one staff or student group over another are eliminated.
7. (1) (2) (3) (4) (5) Each person accepts criticism from those who receive his/her services.
8. (1) (2) (3) (4) (5) School secretaries, custodians, and other school staff (such as bus drivers) participate in faculty meetings and in-service sessions.
9. (1) (2) (3) (4) (5) Responsibilities and "territories" are shared and respected; people are not possessive nor are they fearful that someone will "take over" their job, space, or materials. They say "our school" and "our students", not "mine".
10. (1) (2) (3) (4) (5) Many students are involved in the school's activities—in planning and in implementing. Participation is high and widely distributed.
11. (1) (2) (3) (4) (5) Students participate in solving the problems of the classroom and the school.
12. (1) (2) (3) (4) (5) Students' work is displayed in classrooms, display cases, corridors, and cafeteria.
13. (1) (2) (3) (4) (5) All students are actively included in classroom and school activities, regardless of sex, race, religion, socio-economic status or academic ability.
14. (1) (2) (3) (4) (5) Students feel responsible for keeping the school environment attractive and clean.
15. (1) (2) (3) (4) (5) Teachers know the names of their students, not only those in their classrooms but others in the school.
16. (1) (2) (3) (4) (5) Rules and expectations are clearly defined, stated, and communicated so that people know what to do.
17. (1) (2) (3) (4) (5) Rules apply only to relevant behavior and not to matters that are trivial, highly personal, or have no effect upon the school or class.
18. (1) (2) (3) (4) (5) Disciplinary techniques are used to teach positive ways of behaving, not just to punish or to teach blind obedience.
19. (1) (2) (3) (4) (5) A few good rules are made and enforced rather than having many rules which aren't enforced.
20. (1) (2) (3) (4) (5) Individual differences and a variety of learning styles are respected and accommodated.

• • OVER • •

21. (1) (2) (3) (4) (5) Teachers choose the methods and materials which they can best use to achieve explicit goals.
22. (1) (2) (3) (4) (5) Playgrounds, school buses, cafeteria, hallways, and lavatories are seen as places where students learn; teachers design and implement positive curriculum for teaching behavior in those areas.
23. (1) (2) (3) (4) (5) Field trips, outside speakers, and disciplinary practices are seen as ordinary teaching methods which teachers may use without extraordinary administrative procedures.
24. (1) (2) (3) (4) (5) Before rushing to solve a problem, people clarify whether there is a problem and define what it is.
25. (1) (2) (3) (4) (5) If a person has a problem with another, he or she discusses it directly with that person.
26. (1) (2) (3) (4) (5) Individual and cultural differences are respected and valued and are openly expressed in the school.
27. (1) (2) (3) (4) (5) People assist one another in ways that help them to become independent.
28. (1) (2) (3) (4) (5) Staff members know the neighborhood, the street names, the stores, and the places of entertainment where their students live.
29. (1) (2) (3) (4) (5) School faculty members visit students' homes.
30. (1) (2) (3) (4) (5) Staff members recognize the stereotypes they may hold about the students and the community and work to see students and parents as individuals; the school community works in various ways to break down stereotypes.
31. (1) (2) (3) (4) (5) Staff and administrators frequently participate in groups, institutions, and organizations within the community which can offer support to students and to the school (ex., churches, clubs).
32. (1) (2) (3) (4) (5) Staff members feel responsible for keeping the school environment attractive and clean.
33. (1) (2) (3) (4) (5) Adults and students are able to analyze "trouble areas" in the environment and make provisions to solve problems.
34. (1) (2) (3) (4) (5) Places are designed where small groups can work together without having to talk loudly to be heard.
35. (1) (2) (3) (4) (5) The school is attractive and inviting.
36. (1) (2) (3) (4) (5) Parents participate in school activities and/or are represented in some faculty meetings and inservice sessions.
37. (1) (2) (3) (4) (5) Students take responsibility for enforcing agreed-upon patterns of relationships with other students, teachers and administrators.
38. (1) (2) (3) (4) (5) When decisions are made and procedures established, the educational growth of individual students takes priority over concerns such as adult convenience, pleasing superiors, saving face or maintaining tradition.
39. (1) (2) (3) (4) (5) Teachers know and respect the students' languages, cultures, and individual styles.
40. (1) (2) (3) (4) (5) Each student has a definite contact, preferably an advocate, on the faculty.
41. (1) (2) (3) (4) (5) Rules and other expectations are clearly defined, stated, and communicated so that people know what to do.
42. (1) (2) (3) (4) (5) Due process is applied before punishment (e.g., students have their say and know why they are being punished).
43. (1) (2) (3) (4) (5) Parents are interested in good discipline in the school and work with school personnel to obtain it.
44. (1) (2) (3) (4) (5) Discipline in our school is firm, fair and consistent. All students are treated equally; no group "gets away" with things.
45. (1) (2) (3) (4) (5) School rules are written and steps are taken to see that each pupil/parent/school faculty member, etc., know the rules, or has a copy of the rules (code of conduct).

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APPENDIX D

Circle the answer that best describes your school's organization.
Do not put your name on this document--this is a confidential survey.

		SYSTEM 1	SYSTEM 2	SYSTEM 3	SYSTEM 4
1.	**How much confidence and trust is shown in subordinates?**	*Virtually none*	*Some*	*Substantial amonnt*	*A great deal*
2.	**How free do they feel to talk to superiors about job?**	*Not very free*	*Somewhat free*	*Quite free*	*Very free*
3.	**How often are subordinates' ideas sought and used constructively?**	*Seldom*	*Sometimes*	*Often*	*Very frequently*
4.	**Is predominant use made of 1 fear, 2 threats, 3 punishment, 4 rewards, 5 involvement?**	*1, 2, 3, occasionally, 4*	*4, some 3*	*4, some 3 and 5*	*5, 4, based on group*
5.	**Where is responsibility felt for achieving organization's goals?**	*Mostly at top*	*Top and middle*	*Fairly general*	*At all levels*
6.	**How much cooperative teamwork exists?**	*Very Little*	*Relatively little*	*Moderate amount*	*Great deal*
7.	**What is the usual direction of information flow?**	*Downward*	*Mostly downward*	*Down and up*	*Down, up, and sideways*
8.	**How is downward communication accepted?**	*With suspicion*	*Possibly with suspicion*	*With caution*	*With a receptive mind*
9.	**How accurate is upward communication?**	*Usually inaccurate*	*Often inaccurate*	*Often accurate*	*Almost always accurate*
10.	**How well do superiors know problems faced by subordinates?**	*Not very well*	*Rather well*	*Quite well*	*Very well*
11.	**At what level are decisions made?**	*Mostly at top*	*Policy at top, some delegation*	*Broad policy at top, more delegation*	*Throughout but well integrated*
12.	**Are subordinates involved in decisions related to their work?**	*Almost never*	*Occasionally consulted*	*Generally consulted*	*Fully involved*
13.	**What does decision-making process contribute to motivation?**	*Not very much*	*Relatively little*	*Some contribution*	*Substantial contribution*
14.	**How are organizational goals established?**	*Orders issued*	*Orders, some comments invited*	*After discussion, by orders*	*By group action (except in crisis)*
15.	**How much covert resistance to goals is present?**	*Strong resistance*	*Moderate resistance*	*Some resistance at times*	*Little or none*
16.	**How concentrated are review and control functions?**	*Very highly at top*	*Quite highly at top*	*Moderate delegation to lower levels*	*Widely shared*
17.	**Is there an informal organization resisting the formal one?**	*Yes*	*Usually*	*Sometimes*	*No--same goals as formal*
18.	**What are cost, productivity, and other control data used for?**	*Policing, punishment*	*Reward and punishment*	*Reward, some self-guidance*	*Self-guidance, problem-solving*

APPENDIX E

Interview Question **1**: ***Should a high school education focus more on developing individual potential or on preparation for life after high school?***

	Item Total	%
A. Both		
Prepare for life by developing independent potential	37	31.6
The terms are synonymous	12	10.3
Individual potential affects achievement after HS	8	6.8
Develop life skills	7	6.0
Develop achievement orientation	6	5.1
To prepare if not going to college	6	5.1
Individual potential should be developed in all	5	4.3
Can not predict what individual will do after HS	4	3.4
Total	**85**	**71.4**
B. Life after HS		
Prepare for college	8	6.8
Develop good citizens	5	4.3
Prepare for livelihood	4	3.4
Develop general educated people	3	2.6
Enable to contribute to society	2	1.7
Show Alternatives	2	1.7
Develop moral/ethical behavior	2	1.7
Prepare leaders	1	0.8
Prepare for lifelong learning	1	0.8
Prepare to use technology	1	0.8
Total	**29**	**24.4**
C. Individual potential		
Develop awareness of skills/abilities	3	2.6
Provide challenge/stretch to limits	2	1.7
Total	**5**	**4.3**
Total Responses	**119**	

APPENDIX E
(continued)

Interview Question **2**: ***What do you perceive to be the general mission of the American high school?***

	Item Total	%
A. Personal Development		
Prepare for life after HS	10	6.9
Develop positive self-concept	9	6.3
Meet the needs of each student	7	4.9
Stretch to potential	6	4.1
Develop moral/ethical behavior	5	3.5
Prepare to improve lifestyle	5	3.5
Develop the total person	5	3.5
Determine own abilities	3	2.1
Prepare for lifelong learning	3	2.1
Prepare to adapt to change	3	2.0
Tailor curriculum to each student	1	0.7
Total	**57**	**39.6**
B. Socialization		
Prepare good citizens	20	13.9
Prepare to be productive	8	5.6
Get along with others	6	4.2
Fit into society	5	3.5
Total	**39**	**27.1**
C. Academic Orientation		
Prepare for college/other post-secondary	10	7.2
Develop problem solving abilities	9	5.9
Develop fundamental skills	9	7.2
General education	3	2.0
Total	**31**	**21.5**
D. Work-related		
Prepare for work	7	5.3
Explore possibilities	4	2.6
Total	**11**	**7.6**
E. General		
Balanced approach (academic, social, etc.)	6	4.2
Total	**6**	**4.2**
Total Responses	**144**	

APPENDIX E
(continued)

Interview Question **3**: ***Does your school have a unique mission, other than the general mission of the American high school?***

	Item Total	%
A. UNIQUE MISSION		
1. Personal Development Goals		
Development of self-esteem is greater	20	19.4
Illustrate alternatives	13	12.6
Prepare to change/improve lifestyle	11	10.7
Develop individual to the fullest	8	7.8
Meet individual needs	8	7.8
Develop self-esteem	1	1.0
Total	**61**	**59.2**
2. Academic Goals		
Prepare for college	5	4.9
Greater academic focus	4	3.9
Develop problems solving ability	2	1.9
Essentials/basics	1	1.0
Total	**12**	**11.7**
3. Socialization Goals		
Broaden world view	3	2.9
Develop moral/ethical behavior	1	1.0
Develop social skills	1	1.0
Total	**5**	**4.9**
4. General Comments Goals		
Open to new ideas	2	1.9
Pursuit of excellence	2	1.9
Total	**4**	**3.9**
5. Vocational		
Identify for vocational training	2	1.9
Total	**2**	**1.9**
GRAND TOTAL (Category 1)	**84**	**81.6**
B. SAME AS GENERAL MISSION	**19**	**18.4**
Total Responses	**103**	

APPENDIX E
(continued)

Interview Question **4**: ***Does your school have specific goals to support its mission? What are they?***

	Item Total	%
A. Personal Development		
Meet individual needs	14	9.6
Educate everyone to the fullest	9	6.2
Develop positive self-concept	7	4.8
Prepare for future/life skills	6	4.1
Develop individual potential	5	3.4
Prepare students to compete	4	2.7
Ensure the well being of students	1	0.7
Develop work ethic	1	0.7
Encourage creativity	1	0.7
Total	**48**	**32.9**
B. General		
Reduce dropouts	6	4.1
Goals for accreditation	5	3.4
Meet accreditation goals	4	2.7
Constant improvement	4	2.7
Mutually shared	3	2.1
Develop excellence	3	2.1
Provide learning atmosphere	2	1.4
State Dept. criteria for students to meet	2	1.4
Regularly reviewed	2	1.4
Everyone has input	1	0.7
Be aware of new developments	1	0.7
Ensure grade-level achievement	1	0.7
Total	**34**	**23.3**
C. Academic		
College preparation	16	11.0
Develop basic skills	9	6.9
Provide general education	4	2.7
Develop thing skills	0	0
Total	**29**	**19.9**
D. Socialization		
Develop citizenship	11	7.5
Develop moral/ethical behavior	5	3.4
Provide good role model	4	2.7
Develop community involvement	3	2.1
Develop sense of responsibility	2	1.4
Prepare to fit into society	2	1.4
Broaden world view	2	1.4
Total	**29**	**19.9**
E. Vocational		
Prepare for vocation	4	2.7
Illustrate alternatives	2	1.4
Total	**6**	**4.1**
Total Responses	**146**	

APPENDIX E
(continued)

Interview Question **5**: **How have the school's mission and goals been communicated to teachers and students in this school?**

	Item Total	%
A. STUDENTS		
1. Formal		
Handbooks	21	8.1
Staff-led group work, e.g., assemblies	11	4.3
Reward systems	8	3.1
Discipline code book	3	1.2
Special programs, e.g., special education	1	0.4
Orientation program	1	0.4
Total	**45**	**17.4**
2. Informal		
a. Interaction with teachers		
Spoken communications from teachers (group)	31	12.0
Informal communication (talking)	15	5.8
Teacher expectations	14	5.4
Counselling with individual students	14	5.4
Written communications from teachers	3	1.2
Relating studies to students' lives	1	0.4
Total	**78**	**30.2**
b. Interaction with peers		
Student organization, e.g., student council	6	2.3
Expectations of peers	5	1.9
Total	**11**	**4.3**
GRAND TOTAL (Category 1)	**134**	**51.9**
B. TEACHERS		
1. Formal: Organization		
Faculty/Dept./In-service meetings	28	10.9
Handbooks	12	4.7
Accreditation activities	9	3.5
Committees	9	3.5
Discussion in groups (formal)	5	1.9
Attending/leading workshops	4	1.6
Assigned mentor	1	0.4
Written communications (e.g., memo)	1	0.4
Total	**69**	**26.7**
2. Informal: Personal Interaction		
Discussion in groups (informal)	28	10.9
Discussion with administrators (open)	10	3.9
Total	**38**	**14.7**
GRAND TOTAL (Category 2)	**107**	**41.5**
C. GENERAL COMMENTS		
Overall sense of expectations	10	3.9
Everyone knows the goals	5	1.9
Begins with teacher preparation	1	0.4
Competition with other schools	1	0.4
Total	**17**	**6.6**
Total Responses	**258**	

APPENDIX E
(continued)

Interview Question **6**: ***Does your school have a process for evaluating its success in relation to its mission/goals? (If yes, please explain?)***

	Item Total	%
A. FORMAL MECHANISMS		
1. Traditional Measures		
Test scores	25	12.8
Students going on to postsecondary education	19	9.7
Dropout rate	10	5.1
ACT scores	10	5.1
Grades 7	7	3.6
Graduation rate	3	1.5
Attendance	2	1.0
Total	**76**	**39.0**
2. Evaluation Activities		
Accreditation	14	7.2
Follow-up with graduates (formal)	12	6.2
Teacher evaluations	8	4.1
Follow-up with employers	6	3.1
Surveys of/feedback from students	3	1.5
Subject area evaluations	3	1.5
Ensuring curriculum articulation	1	0.5
Total	**47**	**24.1**
3. Planning Activities		
Survey of /feedback from community	12	6.2
Compare programs with other schools	5	2.6
Long range planning	1	0.5
Contact with civic groups	1	0.5
Total	**19**	**9.7**
GRAND TOTAL (Category 1)	**142**	**72.8**
B. INFORMAL MECHANISMS		
Follow-up with graduates	31	15.9
Observation of individual students	13	6.7
Teacher self-examination	8	4.1
Dialogue with students/graduates	1	0.5
Total	**53**	**27.2**
Total Responses	**195**	

Interview Question **7**: ***We have identified your school as an excellent school in the Appalachian region. What factors do you feel contribute to your excellence?***

	Item Total	%
A. EXTERNAL TO SCHOOL		
1. Community		
Community involved/supportive	30	10.4
Center for community activity	2	0.7
Total	**32**	**11.1**
2. Parents		
Parents involved/supportive	27	9.4
Active PTA	3	1.0
Total	**30**	**10.4**
GRAND TOTAL (Catetory 1)	**62**	**21.5**
B. INTERNAL TO SCHOOL		
1. Staff		
Excellent staff/well trained	23	8.0
Hard working	16	5.5
High expectations (i.e., expect the best of students)	9	3.1
Effective teachers	8	2.8
Staff cohesiveness/cooperation	6	2.1
Meet students' needs	5	1.7
Loyalty of teachers	3	1.0
Network with other educators	2	0.7
Low turnover rate	2	0.7
Total	**74**	**25.6**
2. Human relations		
Caring attitude	17	5.9
Close relationships	14	4.8
High expectations	14	4.8
Positive attitude	7	2.4
Open communication	4	1.4
Recognition of students' achievements	3	1.0
Total	**59**	**20.4**
3. Administration		
Administration support	11	3.8
Strong/non-political board of education	10	3.5
Building level leadership	8	2.8
Strong central office support	7	2.4
High expectations	2	0.7
Administration open to new ideas	1	0.4
Administration allows teachers input	1	0.4
Administration implements teachers' ideas	1	0.4
Total	**41**	**14.2**

Interview Question 7 contintued on next page

	Item Total	%
4. General		
Sense of pride	5	1.7
Curricular content	5	1.7
Extra-curriculars complement academics	3	1.0
Competitive nature	2	0.7
Consistency	2	0.7
Implement new ideas	2	0.7
Primarily the human element	1	0.4
Total	**20**	**6.9**
5. Students		
Value education	7	2.4
Students feel need to succeed	4	1.4
No discipline problems	3	1.0
Low dropout rate	1	0.4
Total	**15**	**5.2**
6. Physical /Material		
Adequate/good facilities	7	2.4
Adequate resources	6	2.1
Total	**13**	**4.5**
7. School's size		
Small in size	4	1.4
Small class size	1	0.4
Total	**5**	**1.8**
GRAND TOTAL (Category 2)	**227**	**78.5**
Total Responses	**289**	

APPENDIX E
(continued)

Interview Question **8**: ***How does the principal exercise his/her role as leader of the school? What does he/she do to contribute to the success of the school?***

	Item Total	%
A. DEALINGS WITH TEACHERS		
1. Interpersonal skills		
Listens to teachers/open to discussion	17	5.9
Trusts teachers' judgment	14	4.9
Respects faculty	9	3.1
Recognizes good work	8	2.8
Respected by faculty	7	2.4
Values teachers' opinions	6	2.1
Tolerant/open-minded	5	1.7
Total	**66**	**22.9**
2. Instructional Leadership		
Ensures teachers do their job	15	5.2
Available	12	4.2
Offers suggestions	7	2.4
Communicates expectations	4	1.4
Stresses innovation	3	1.0
Distributes tasks fairly	2	0.7
Intercedes with central office	1	0.4
Aware of new trends/well informed	1	0.4
Total	**45**	**15.6**
3. Decision maker		
Shares authority	15	5.2
Implements suggestions	11	3.8
Total	**26**	**9.0**
4. Supporting role		
Supportive of teachers (generally)	14	4.9
Supportive of programs	4	1.4
Gets needed resources	3	1.0
Total	**21**	**7.3**
GRAND TOTAL (Category 1)	**158**	**54.9**
B. GENERAL TRAITS		
1. Discharge of duties		
Active/visible/circulates	13	4.5
Organized	7	2.4
Gives all-out effort/energetic/works hard	7	2.4
Sets tone	5	1.7
Maintains routines	4	1.4
Good at public relations	3	1.0
Provides structure	3	1.1
Consistent	2	0.7
Thorough	2	0.7
Total	**46**	**16.0**

Interview Question 8 continued on next page

	Item Total	%
2. Leadership Qualities		
Has high expectations	8	2.8
Decisive	6	2.1
Identifies/solves problems	5	1.7
Has vision	4	1.4
Morally strong/has integrity	4	1.4
Seeks input	3	1.0
Seeks consensus	2	0.7
Knows limitations	2	0.7
Aware of what is happening	1	0.4
Total	**35**	**12.2**
3. Interpersonal skills		
Not dictatorial/flexible	13	4.5
Approachable	9	3.3
Gets along well with other people	3	1.0
Caring attitude	2	0.7
Does not show favoritism	1	0.4
Has sense of humor	1	0.4
Total	**29**	**10.1**
GRAND TOTAL for Category I	**110**	**38.2**
C. DEALINGS WITH STUDENTS		
Maintains discipline	9	3.1
Has rapport with students	5	1.7
Supports student activities	5	1.7
Treats students fairly	1	0.4
Total	**20**	**6.9**
Total Responses	**288**	

APPENDIX F

PERFORMANCE
MEAN SCORES

	Students			Teachers			Community Members			State		GT
SKILLS	**KY**	**TN**	**Total**	**KY**	**TN**	**Total**	**KY**	**TN**	**Total**	**KY**	**TN**	
Academic												
1 Read	3.86	3.89	3.87	3.18	3.62	3.43	3.52	3.74	3.66	3.60	3.77	3.69
2 Write	3.69	3.94	3.83	2.91	3.39	3.19	3.39	3.62	3.53	3.40	3.70	3.57
3 Math	3.61	3.94	3.78	3.26	3.61	3.47	3.52	3.49	3.50	3.49	3.75	3.64
4 Speak	3.41	3.53	3.47	2.93	3.21	3.09	3.35	3.56	3.48	3.24	3.42	3.34
5 Listen	3.29	3.69	3.50	2.88	3.19	3.06	3.26	3.44	3.37	3.15	3.48	3.33
6 Critical Think.	3.48	3.72	3.61	2.82	2.93	2.88	3.39	3.51	3.47	3.25	3.41	3.34
Work-related												
7 Follow Task	3.72	3.94	3.84	3.33	3.48	3.42	3.26	3.62	3.48	3.54	3.73	3.64
8 Prod. Q. Work	3.85	3.95	3.90	3.06	3.41	3.26	3.39	3.72	3.60	3.53	3.72	3.64
9 Under super.	3.70	3.82	3.76	3.57	3.75	3.67	3.57	3.82	3.73	3.64	3.79	3.73
10 Ideas	3.51	3.74	3.63	3.30	3.48	3.41	3.35	3.44	3.41	3.42	3.60	3.52
11 Get along	3.65	3.79	3.73	3.73	3.85	3.80	3.44	3.92	3.74	3.65	3.83	3.75
Personal												
12 Community act.	3.33	3.46	3.40	3.33	3.19	3.25	3.26	3.66	3.51	3.33	3.39	3.36
13 Ethical/moral	3.52	3.55	3.54	3.27	3.55	3.43	3.17	3.55	3.41	3.40	3.55	3.48
14 Physical health	3.52	3.85	3.69	3.52	3.58	3.55	3.17	3.95	3.66	3.48	3.77	3.64
15 Arts	3.22	3.54	3.39	2.88	2.83	2.85	3.00	2.85	2.90	3.08	3.18	3.14
16 Grooming	3.65	3.68	3.67	3.57	3.52	3.54	3.13	3.46	3.34	3.56	3.59	3.58
n=	**111**	**126**	**237**	**67**	**91**	**158**	**23**	**41**	**64**	**258**	**201**	**459**
AREA				**MEAN**								
Academic	3.56	3.79	3.68	3.00	3.32	3.19	3.41	3.56	3.50	3.35	3.59	3.48
Work-related	3.68	3.85	3.77	3.40	3.59	3.51	3.40	3.70	3.59	3.56	3.74	3.66
Personal	3.45	3.62	3.54	3.31	3.33	3.32	3.15	3.49	3.36	3.37	3.50	3.44
Academic				**RANK**								
1 Read	1	5	2	10	3	6	2.5	4	3.5	3	3	3
2 Write	5	2	4	13	11	12	6	7.5	6	10	8	9
3 Math	8	4	5	9	4	5	2.5	12	8	7	5	7
4 Speak	13	15	14	12	12	13	8.5	9	9.5	14	13	13
5 Listen	15	11	13	14.5	13	14	11	14.5	14	15	12	15
6 Critical Think.	12	10	11	16	15	15	6	11	11	13	14	14
Work-related												
7 Follow Task	3	3	3	6	9	8	11	7.5	9.5	5	6	4
8 Prod. Q. Work	2	1	1	11	10	10	6	5	5	6	7	6
9 Under super.	4	7	6	2.5	2	2	1	3	2	2	2	2
10 Ideas	11	9	10	7	8	9	8.5	14.5	13	9	9	10
11 Get along	6.5	8	7	1	1	1	4	2	1	1	1	1
Personal												
12 Community act.	14	16	15	5	14	11	11	6	7	12	15	12
13 Ethical/moral	9	13	12	8	6	7	13.5	10	12	11	11	11
14 Physical health	10	6	8	4	5	3	13.5	1	3.5	8	4	5
15 Arts	16	14	16	14.5	16	16	16	16	16	16	16	16
16 Grooming	6.5	12	9	2.5	7	4	15	13	15	4	10	8
MEAN RANK FOR EACH AREA												
Academic	9.0	7.8	8.2	12.4	9.7	10.8	6.1	9.7	8.7	10.3	9.2	10.2
Work-related	5.3	5.6	5.4	5.5	6.0	6.0	6.1	6.4	6.1	4.6	5.0	4.6
Personal	11.1	12.2	12.0	6.8	9.6	8.2	13.8	9.2	10.7	10.2	11.2	10.4

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APPENDIX G

The SEI Performance data for Kentucky (KY) and Tennessee (TN) high school students (ST), teachers (TE), and community members (CM) representing "good" rural Appalachian high schools.

OUTCOMES	*F-test* KY ST/TE/CM	*F-test* TN ST/TE/CM	*F-test* GT ST/TE/CM	*t-test* KY/TN *p*
Academic				
1 Read	9.091 * 1	2.840 * 1	10.657 * 1	.0255 *
2 Write	12.287 * 1	9.855 * 1	20.485 * 1	.0008 **
3 Math	2.393	5.531 * 1, 2	5.875 * 1	.0018 **
4 Speak	4.968 * 1	3.574 * 1	7.189 * 1, 3	.0321 *
5 Listen	2.908	5.735 * 1	7.700 * 1	.0010 **
6 Critical Thinking	7.082 * 1	14.975 * 1, 3	20.962 * 1, 3	.0770
Work-related				
7 Follow Task	3.599	6.131 * 1	8.823 * 1	.0264 *
8 Prod. Q. Work	12.085 * 1	9.686 * 1	20.871 * 1	.0217 *
9 Under super.	.359	.180	.400	.0521
10 Ideas	.789	2.548	2.762	.0284 *
11 Getting along	.655	.270	.234	.0321 *
Personal				
12 Community act.	.042	3.362	1.608	.2501
13 Ethical/moral	1.487	.000	.630	.0661
14 Physical health	.932	2.909	.835	.0019 **
15 Arts	1.891	12.201 * 1, 2	11.967 * 1, 2	.1722
16 Grooming	2.024	.954	2.362	.4003
Total: 1's=ST v. TE	**5**	**9**	**9**	
Scheffee 2's=ST v. CM	**0**	**2**	**1**	
3's=TE v. CM	**0**	**1**	**2**	
Total/t-test				**10**

* $p \leq .05$ (ANOVA, t-test)
** $p \leq .01$ (t-test)

Scheffe, $p \leq .05$: 1=ST v. TE; 2=ST v. CM; 3=TE v. CM

APPENDIX H

WAYSON SCHOOL CLIMATE AND CONTEXT INVENTORY
Question's Mean (M) and Rank (RK)

	TENNESSEE								KENTUCKY								GRAND TOTAL	
	TN1		TN2		TN3		TN Total		KY1		KY2		KY3		KY Total			
Question	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk
1	4.30	22	4.00	17	4.65	12	*4.33*	16.5	3.75	15.5	3.80	18.5	4.25	17.5	*3.93*	16	4.13	17
2	4.20	24.5	3.50	34	4.45	22.5	*4.05*	28.5	3.45	29	3.65	23.5	4.15	22.5	*3.75*	27	3.90	28.5
3	4.50	10.5	4.25	8.5	4.30	31.5	*4.35*	14	3.35	33	3.30	34.5	4.10	24.5	*3.58*	32	3.97	23.5
4	4.40	18	3.85	21	4.35	26.5	*4.20*	22	3.35	33	3.60	26.5	4.35	12.5	*3.77*	25.5	3.98	22
5	4.15	27.5	3.70	26	4.45	22.5	*4.10*	27	3.70	17.5	3.80	18.5	4.20	20	*3.90*	17	4.00	21
6	4.15	27.5	3.70	26	4.55	16.5	*4.13*	25.5	3.55	24	3.45	31.5	3.50	41	*3.50*	34	3.82	31
7	4.20	24.5	3.53	33	4.16	38	*3.97*	31	3.20	36.5	3.75	21.5	3.90	34	*3.62*	30	3.79	32
8	3.15	43	1.85	45	3.05	44	*2.68*	44	1.05	45	3.45	31.5	2.35	45	*2.28*	45	2.48	45
9	4.45	13.5	3.75	24.5	4.30	31.5	*4.17*	23	2.90	42	4.00	12	4.20	20	*3.70*	28	3.93	26
10	3.75	37.5	3.55	30.5	4.25	35	*3.85*	35.5	2.95	41	3.35	33	3.55	39.5	*3.28*	41	3.57	37
11	3.50	42	3.00	38.5	4.20	37	*3.59*	41	3.10	39	3.30	34.5	3.05	43	*3.15*	42	3.36	41
12	3.90	34	3.55	30.5	4.35	26.5	*3.93*	32.5	3.60	20.5	3.45	30	4.55	6.5	*3.87*	19	3.90	28.5
13	4.65	5.5	4.55	3	4.70	10	*4.60*	2.5	3.95	10	4.15	8.5	4.45	9.5	*4.18*	8	4.39	6
14	3.75	37.5	2.70	42	4.55	16.5	*3.67*	39	2.75	43	2.55	44	3.20	42	*2.83*	43	3.25	43
15	4.70	3	4.42	5	4.35	26.5	*4.49*	6	3.90	11	4.45	4	4.65	4	*4.33*	5	4.41	5
16	4.35	18.5	4.12	12	4.90	2	*4.46*	8	4.35	6	3.55	28	4.30	15	*4.07*	11	4.26	11
17	4.45	13.5	4.05	15	4.63	13	*4.37*	12.5	4.60	3	4.30	6.5	4.00	29.5	*4.30*	7	4.34	7.5
18	4.35	18.5	3.75	24.5	4.55	16.5	*4.22*	20.5	3.70	17.5	3.75	21.5	4.05	26.5	*3.83*	21.5	4.03	20
19	4.50	10.5	3.90	19.5	4.75	6	*4.38*	11	3.85	12.5	3.50	29	3.95	32	*3.77*	25.5	4.08	19
20	4.70	3	4.35	7	4.70	10	*4.58*	4	3.55	22	4.15	8.5	4.25	17.5	*3.98*	15	4.28	10
21	4.80	1	4.65	2	4.85	4.5	*4.77*	1	4.45	4.5	4.55	3	4.55	6.5	*4.52*	3	4.64	1.5
22	4.10	30	3.00	38.5	4.33	29	*3.79*	37	3.20	36.5	3.00	38.5	4.05	26.5	*3.42*	36	3.60	35
23	4.65	5.5	3.80	22	4.55	16.5	*4.33*	16.5	3.45	29	3.60	26.5	4.50	8	*3.85*	20	4.43	4
24	4.05	31	3.95	18	4.45	22.5	*4.15*	24	3.50	26.5	3.85	16	4.00	29.5	*3.79*	23	3.97	23.5
25	4.00	32	3.55	31	4.00	41.5	*3.85*	35.5	3.05	40	3.25	38	3.65	37	*3.32*	39	3.58	38
26	4.35	18.5	4.25	8.5	4.60	14	*4.40*	10	3.75	15.5	4.00	12	4.35	12.5	*4.03*	13.5	4.22	15
27	4.35	18.5	4.05	15	4.50	19.5	*4.30*	19	3.50	26.5	4.00	12	4.15	22.5	*3.88*	18	4.09	18
28	4.45	13.5	4.40	6	4.15	38.5	*4.33*	16.5	4.15	7.5	4.35	5	4.45	9.5	*4.32*	6	4.33	9
29	2.80	45	2.40	44	2.75	45	*2.65*	45	2.25	44	2.20	45	2.84	44	*2.42*	44	2.54	44
30	4.15	27.5	3.55	30.5	4.25	35	*3.98*	30	3.55	24	3.80	18.5	4.00	29.5	*3.78*	24	3.88	30
31	4.45	13.5	4.05	15	4.50	19.5	*4.33*	16.5	3.85	12.5	4.10	10	4.40	11	*4.12*	10	4.23	13.5
32	4.60	7	4.15	11	4.80	6.5	*4.52*	5	3.84	14	3.95	14	4.65	4	*4.15*	9	4.34	7.5
33	3.90	34	3.45	35	4.45	22.5	*3.93*	32.5	3.35	33	3.63	25	3.90	34	*3.62*	30	3.78	33
34	3.55	41	2.60	43	4.30	31.5	*3.48*	42	3.40	31	3.00	38.5	3.90	34	*3.44*	35	3.46	39.5
35	4.70	3	2.80	40	4.90	2	*4.13*	25.5	4.45	4.5	3.90	15	4.75	2	*4.37*	4	4.25	12
36	3.05	44	2.74	41	4.00	41.5	*3.26*	43	3.15	38	2.65	43	4.20	20	*3.33*	37.5	3.30	42
37	3.70	39	3.21	36	4.15	39.5	*3.70*	38	3.45	29	3.00	38.5	3.55	39.5	*3.33*	37.5	3.51	38
38	4.15	27.5	3.70	26	4.30	31.5	*4.05*	28.5	3.60	20.5	3.80	18.5	4.10	24.5	*3.83*	21.5	3.94	25
39	4.55	8.5	4.20	10	4.35	26.5	*4.37*	12.5	3.55	24	4.30	6.5	4.30	15	*4.05*	12	4.21	16
40	3.85	38	3.10	37	3.90	43	*3.62*	40	3.25	35	3.05	37	3.62	38	*3.31*	40	3.46	39.5
41	4.30	22	4.10	13	4.90	2	*4.43*	9	4.15	7.5	3.65	23.5	4.30	15	*4.03*	13.5	4.23	13.5
42	4.55	8.5	4.45	4	4.80	6.5	*4.60*	2.5	4.75	2	4.65	1.5	4.65	4	*4.68*	2	4.64	1.5
43	3.60	40	3.90	19.5	4.25	35	*3.92*	34	3.65	19	2.95	42	4.00	29.5	*3.53*	33	3.73	34
44	4.30	22	3.65	28	4.70	10	*4.22*	20.5	4.10	9	3.00	38.5	3.75	36	*3.62*	30	3.92	27
45	3.90	34	4.70	1	4.85	4.5	*4.48*	7	4.80	1	4.65	1.5	4.80	1	*4.75*	1	4.62	3

WAYSON's EIGHT SCHOOL CLIMATE AREAS
Climate area's mean (M) and mean rank (MRk)

Areas	$\bar{X}$	MRk	$\bar{X}$	MRk	$\bar{X}$	MRk	$\bar{X}$	MRk	$\bar{X}$	MRk	$\bar{X}$	MRk	$\bar{X}$	MRk	$\bar{X}$	$\bar{X}$	$\bar{X}$	MRk
1	4.21	23.3	3.75	23.8	4.39	25.8	4.12	24.3	3.51	26.2	3.53	26.7	4.10	22.8	3.71	25.8	3.91	25.0
2	4.16	23.0	3.58	24.8	4.35	21.2	4.03	22.2	3.39	23.7	3.71	22.9	3.81	27.9	3.63	26.1	3.83	25.1
3	4.08	25.5	3.63	24.6	4.33	27.6	4.01	26.1	3.38	27.9	3.58	24.7	3.92	24.7	3.63	26.3	3.82	27.0
4	4.28	20.4	4.04	16.3	4.66	12.6	4.33	14.6	4.15	10.1	3.93	17.5	4.20	21.4	4.09	14.6	4.21	14.3
5	4.56	9.9	3.95	17.4	4.61	15.0	4.37	14.6	3.66	23.0	3.83	19.1	4.34	14.6	3.94	18.5	4.24	12.6
6	4.19	25.0	3.95	18.1	4.39	24.4	4.18	22.1	3.45	27.1	3.78	19.0	4.04	25.4	3.75	23.4	3.96	23.1
7	3.75	30.6	3.51	26.0	3.98	35.9	3.75	30.8	3.43	24.2	3.34	27.3	3.98	23.9	3.58	25.8	3.67	28.8
8	4.19	21.3	3.25	32.3	4.61	15.6	4.02	26.3	3.76	20.6	3.62	23.1	4.30	18.5	3.90	19.5	3.96	23.0

Climate area's mean (M) and rank (Rk)

Areas	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	RK
1	4.21	3	3.75	4	4.39	4	4.12	4	3.51	4	3.53	7	4.10	4	3.77	4	3.92	5
2	4.16	6	3.58	6	4.35	6	4.03	5	3.39	7	3.71	4	3.81	8	3.63	6	3.83	6
3	4.08	7	3.63	5	4.33	7	4.01	7	3.38	8	3.58	6	3.92	7	3.63	7	3.82	7
4	4.28	2	4.04	1	4.66	1	4.33	2	4.15	1	3.93	1	4.20	3	4.09	1	4.21	2
5	4.56	1	3.95	2.5	4.61	3	4.37	1	3.66	3	3.83	2	4.34	1	3.94	2	4.24	1
6	4.19	4.5	3.95	2.5	4.39	5	4.18	3	3.45	5	3.78	3	4.04	5	3.76	5	3.97	3
7	3.75	8	3.51	7	3.98	8	3.75	8	3.43	6	3.34	8	3.98	6	3.58	8	3.67	8
8	4.19	4.5	3.25	8	4.61	2	4.02	6	3.76	2	3.62	5	4.30	2	3.90	3	3.96	4

BEST COPY AVAILABLE

APPENDIX I

Likert's Organization Characteristics (LOC)

	TENNESSEE								KENTUCKY								GRAND TOTAL	
	TN1		TN2		TN3		Total		KY1		KY2		KY3		Total			
QUESTIONS	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk
1	3.40	7	3.68	1	3.11	6	3.34	2	2.87	10.5	2.64	9	3.16	9.5	2.86	11	3.15	4
2	3.60	3	3.54	3	2.63	13	3.11	10	2.67	14.5	2.54	13	3.16	9.5	2.76	13	2.97	11
3	3.15	14	2.70	16	2.73	11	2.82	13	2.60	16	2.36	16	2.90	15.5	2.58	16	2.72	16
4	3.21	12	3.04	8	2.63	14	2.87	12	3.20	4	3.00	2	3.35	5	3.16	2	2.99	10
5	3.35	9	3.23	4	2.96	9	3.12	8	2.73	12.5	2.89	4	3.32	6.5	2.98	7	3.07	8
6	3.55	4	3.04	9	3.20	4	3.22	4	2.93	9	2.71	8	3.37	3.5	2.97	8	3.12	6
7	3.30	11	2.86	12.5	2.85	10	2.95	11	2.73	12.5	2.50	14	3.05	11.5	2.73	14	2.86	13
8	3.50	5	3.64	2	3.44	2	3.52	1	3.13	5	3.11	1	3.67	1	3.28	1	3.43	1
9	3.32	10	3.00	10.5	3.17	5	3.15	7	3.00	7.5	2.85	6	2.90	15.5	2.90	10	3.05	9
10	2.85	18	2.57	17	2.57	15	2.63	17	2.07	18	2.00	17	2.58	16	2.19	17	2.46	17
11	3.05	16	2.54	18	2.13	18	2.45	18	2.20	17	1.71	18	2.84	17	2.18	18	2.34	18
12	3.00	17	3.00	10.5	2.52	16	2.76	16	2.67	14.5	2.43	15	3.00	13.5	2.66	15	2.72	15
13	3.70	1	3.15	5	3.00	7.5	3.20	5	3.40	1	2.61	10.5	3.32	6.5	3.02	5.5	3.13	5
14	3.11	15	3.07	7	2.50	17	2.79	15	3.33	2	2.61	10.5	3.37	3.5	3.02	5.5	2.88	12
15	3.40	7	2.86	12.5	3.26	3	3.12	9	3.00	7.5	2.89	5	3.05	11.5	2.97	9	3.09	7
16	3.17	13	2.73	15	2.70	12	2.81	14	2.87	10.5	2.59	12	3.00	13.5	2.76	12	2.80	14
17	3.40	7	2.79	14	3.46	1	3.25	3	3.27	3	2.96	3	3.28	8	3.14	3	3.20	2
18	3.65	2	3.13	6	3.00	7.5	3.19	6	3.07	6	2.85	7	3.50	2	3.13	4	3.17	3
n =	20		25		46		91		15		28		19		62		153	
Mean =	3.32		3.03		2.88		3.02		2.87		2.63		3.18		2.85		2.95	
SD =	0.24		0.33		0.36		0.27		0.36		0.35		0.27		0.30		0.27	

Mean Score and rank (Rk) for each Area

AREAS	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk	$\bar{X}$	Rk
1	3.38	2	3.31	1	2.82	5	3.09	1	2.71	4	2.51	5	3.07	4	2.73	5	2.95	5
2	3.37	3	3.10	2	2.93	3	3.07	3	2.96	3	2.87	1	3.35	1	3.04	1	3.06	1
3	3.24	6	3.02	5	3.01	2	3.06	4	2.73	6	2.62	4	3.05	6	2.78	4	2.95	4
4	3.25	5	2.90	4	2.55	6	2.80	6	2.76	5	2.25	6	3.05	5	2.62	6	2.73	6
5	3.26	4	2.97	3	2.88	4	2.95	5	3.17	1	2.75	3	3.21	3	2.99	3	2.99	3
6	3.41	1	2.88	6	3.05	1	3.08	2	3.07	2	2.80	2	3.26	2	3.02	2	3.06	2

1. Leadership: Items 1-3
2. Motivation: Items 4-6
3. Communication: Items 7-10
4. Decisions: Items 11-13
5. Goals: Items 14-15
6. Control: Items 16-18

APPENDIX J

EXPECTATIONS
MEAN SCORES

	Students			Teachers			Community Members			State		GT
SKILLS	**KY**	**TN**	**Total**	**KY**	**TN**	**Total**	**KY**	**TN**	**Total**	**KY**	**TN**	
Academic												
1 Read	4.55	4.75	4.64	4.91	4.91	4.91	4.87	4.73	4.78	4.81	4.68	4.75
2 Write	4.15	4.41	4.29	4.61	4.64	4.63	4.17	4.34	4.28	4.48	4.31	4.41
3 Math	4.44	4.40	4.42	4.60	4.62	4.61	4.39	4.56	4.50	4.50	4.23	4.49
4 Speak	4.16	4.39	4.28	4.56	4.52	4.54	4.30	4.17	4.22	4.40	4.31	4.36
5 Listen	4.16	4.42	4.30	4.82	4.75	4.78	4.30	4.49	4.42	4.55	4.40	4.48
6 Critical Think.	4.15	4.32	4.24	4.66	4.66	4.66	4.17	4.38	4.30	4.45	4.32	4.39
Work-related												
7 Follow Task	4.32	4.56	4.45	4.84	4.74	4.79	4.57	4.59	4.58	4.62	4.52	4.58
8 Prod. Q. Work	4.43	4.61	4.53	4.75	4.67	4.70	4.52	4.63	4.59	4.64	4.55	4.60
9 Under super.	3.96	4.24	4.11	4.55	4.31	4.41	3.95	4.34	4.20	4.28	4.16	4.23
10 Ideas	4.02	4.19	4.11	4.36	4.41	4.39	4.17	4.27	4.23	4.28	4.15	4.22
11 Get along	4.49	4.64	4.57	4.67	4.64	4.65	4.44	4.59	4.53	4.63	4.54	4.59
Personal												
12 Community act.	3.67	3.87	3.77	3.85	3.89	3.87	3.78	4.20	4.05	3.93	3.74	3.85
13 Ethical/moral	4.20	4.31	4.26	4.85	4.80	4.82	4.52	4.66	4.61	4.54	4.45	4.50
14 Physical health	4.24	4.58	4.42	4.63	4.50	4.55	4.09	4.39	4.28	4.52	4.35	4.45
15 Arts	3.43	3.94	3.71	3.90	3.90	3.90	3.39	3.49	3.45	3.86	3.58	3.74
16 Grooming	4.32	4.62	4.48	4.39	4.32	4.35	4.00	4.22	4.14	4.45	4.31	4.39
n =	**111**	**126**	**237**	**67**	**91**	**158**	**23**	**41**	**64**	**258**	**201**	**459**
AREA				**MEAN**								
Academic	4.3	4.4	4.4	4.7	4.7	4.7	4.4	4.4	4.4	4.5	4.4	4.5
Work-related	4.2	4.4	4.4	4.6	4.6	4.6	4.3	4.5	4.4	4.5	4.4	4.4
Personal	4.0	4.3	4.1	4.3	4.3	4.3	4.0	4.2	4.1	4.3	4.1	4.2
Academic				**RANK**								
1 Read	1	1	1	1	1	1	1	1	1	1	1	1
2 Write	11	8	9	9	7.5	8	10	10.5	9.5	10	9	9
3 Math	3	9	7	10	9	9	6	6	6	12	8	6
4 Speak	10	10	10	11	10	11	7.5	15	12	9	12	12
5 Listen	9	7	8	4	3	4	7.5	7	7	6	5	7
6 Critical Think.	12	11	12	7	6	6	10	9	8	8	10	10
Work-related												
7 Follow Task	6	6	5	3	4	3	2	4.5	4	4	4	4
8 Prod. Q. Work	4	4	3	5	5	5	3.5	3	3	2	2	2
9 Under super.	14	13	13.5	12	14	12	14	10.5	13	13	13	13
10 Ideas	13	14	13.5	14	12	13	10	12	11	14	14	14
11 Get along	2	2	2	6	7.5	7	5	4.5	5	3	3	3
Personal												
12 Community act.	15	16	15	16	16	16	15	14	15	15	15	15
13 Ethical/moral	8	12	11	2	2	2	3.5	2	2	5	6	5
14 Physical health	7	5	6	8	11	10	12	8	9.5	7	7	8
15 Arts	16	15	16	15	15	15	16	16	16	16	16	16
16 Grooming	5	3	4	13	13	14	13	13	14	11	11	11
AREA				**MEAN RANK FOR EACH AREA**								
Academic	7.7	7.7	7.8	7.0	6.1	6.5	7.0	8.1	7.3	7.7	7.5	7.5
Work-related	7.8	7.8	7.4	8.0	8.5	8.0	6.9	6.9	7.2	7.2	7.2	7.2
Personal	10.2	10.2	10.4	10.8	11.4	11.4	11.9	10.6	11.3	10.8	11.0	11.0

APPENDIX K

The SEI Expectation data for Kentucky (KY) and Tennessee (TN) high school students (ST), teachers (TE), and community members (CM) representing "good" rural Appalachian high schools.

OUTCOMES	*F-test* KY ST/TE/CM	*F-test* TN ST/TE/CM	*F-test* GT ST/TE/CM	*t-test* KY/TN *p*
Academic				
1 Read	4.344 * 1	8.600 * 1	11.678 * 1	.0097 *
2 Write	4.323 * 1	6.299 * 1	10.404 * 1, 3	.0085 *
3 Math	2.839	11.924 * 1	14.009 * 1, 2	.0001 *
4 Speak	2.924	4.552	5.805 * 1, 3	.1221
5 Listen	5.549 * 1	13.030 * 1, 3	17.839 * 1, 3	.0255 *
6 Critical Thinking	5.388 * 1	8.403 * 1, 3	14.295 * 1, 3	.0410 *
Work-related				
7 Follow Task	2.276	9.626 * 1	10.932 * 1	.0597
8 Prod. Q. Work	.237	4.024 * 1	3.257 * 1	.0810
9 Under super.	.335	9.075 * 1, 3	5.654 * 1	.0747
10 Ideas	2.083	3.187 * 1	5.437 * 1	.0471 *
11 Getting along	.124	1.427 * 1	.906	.0912
Personal				
12 Community act.	2.220	.626	2.025	.0198 *
13 Ethical/moral	12.974 * 1, 2	11.525 * 1	24.696 * 1, 2	.1306
14 Physical health	1.298	5.276 * 1, 3	2.976 *	.0118 *
15 Arts	3.455 * 2	3.701 * 1	4.088 * 3	.0036 **
16 Grooming	7.169 * 1, 2	1.518	4.592 * 2	.0665
Total: 1's=ST v. TE	**6**	**13**	**11**	
Scheffe 2's=ST v. CM	**3**	**0**	**3**	
3's=TE v. CM	**0**	**4**	**5**	
Total/t-test				**9**

* $p \leq .05$ (ANOVA, t-test)
** $p \leq .01$ t-test)

Scheffe, $p \leq .05$: 1=ST v. TE
2=ST v. CM
3=TE v. CM

APPENDIX L

DISSONANCE
(Expectation [EX] minus Performance [PE])

SKILLS	Students KY	Students TN	Students Total	Teachers KY	Teachers TN	Teachers Total	Community Members KY	Community Members TN	Community Members Total	State KY	State TN	GT
Academic												
1 Read	0.69	0.87	0.76	1.73	1.30	1.48	1.35	0.99	1.12	1.21	0.91	1.06
2 Write	0.46	0.47	0.47	1.70	1.25	1.44	0.78	0.73	0.75	1.08	0.61	0.84
3 Math	0.83	0.46	0.63	1.34	1.01	1.15	0.87	1.07	1.00	1.02	0.48	0.86
4 Speak	0.76	0.86	0.81	1.64	1.31	1.45	0.96	0.61	0.74	1.16	0.89	1.02
5 Listen	0.87	0.73	0.80	1.94	1.56	1.72	1.04	1.05	1.05	1.40	0.92	1.15
6 Critical Think.	0.66	0.61	0.63	1.84	1.73	1.78	0.78	0.86	0.83	1.20	0.91	1.05
Work-related												
7 Follow Task	0.60	0.62	0.61	1.51	1.25	1.37	1.30	0.97	1.09	1.09	0.79	0.94
8 Prod. Q. Work	0.59	0.66	0.62	1.69	1.26	1.44	1.13	0.92	1.00	1.11	0.82	0.96
9 Under super.	0.26	0.42	0.35	0.99	0.56	0.74	0.38	0.52	0.48	0.64	0.37	0.50
10 Ideas	0.51	0.45	0.48	1.06	0.92	0.98	0.83	0.83	0.83	0.86	0.55	0.70
11 Get along	0.84	0.85	0.84	0.94	0.79	0.86	1.00	0.66	0.79	0.98	0.71	0.84
Personal												
12 Community act.	0.33	0.41	0.36	0.52	0.70	0.63	0.52	0.54	0.54	0.61	0.35	0.48
13 Ethical/moral	0.68	0.76	0.72	1.58	1.25	1.39	1.35	1.11	1.20	1.14	0.90	1.02
14 Physical health	0.73	0.73	0.73	1.11	0.92	1.00	0.91	0.44	0.62	1.04	0.59	0.81
15 Arts	0.21	0.40	0.32	1.02	1.07	1.04	0.39	0.64	0.55	0.78	0.40	0.60
16 Grooming	0.68	0.94	0.82	0.82	0.81	0.81	0.87	0.76	0.80	0.89	0.72	0.81
n =	**111**	**126**	**237**	**67**	**91**	**158**	**23**	**41**	**64**	**258**	**201**	**459**
MEAN												
Academic	0.71	0.66	0.68	1.70	1.36	1.50	0.96	0.88	0.91	1.18	0.79	1.00
Work-related	0.56	0.60	0.58	1.24	0.96	1.08	0.93	0.78	0.84	0.94	0.65	0.79
Personal	0.52	0.65	0.59	1.01	0.95	0.97	0.81	0.70	0.74	0.89	0.59	0.74
RANK												
Academic												
1 Read	6	2	5	3	4	3	1	4	2	2	2	2
2 Write	13	11	13	4	8	6	13	10	11	11	8	10
3 Math	3	12	9	9	10	9	10	2	5	5	10	8
4 Speak	4	3	3	6	3	4	7	13	12	12	4	5
5 Listen	1	7	4	1	2	2	5	3	4	4	1	1
6 Critical Think.	9	10	8	2	1	1	12	7	7	7	3	3
Work-related												
7 Follow Task	10	9	11	8	7	8	3	5	3	3	7	7
8 Prod. Q. Work	11	8	10	5	5	5	4	6	6	6	6	6
9 Under super.	15	14	15	13	16	15	16	15	16	16	15	15
10 Ideas	12	13	12	11	11	12	11	8	8	8	13	13
11 Get along	2	4	1	14	14	13	6	11	10	10	11	9
Personal												
12 Community act.	14	15	14	16	15	16	14	14	15	15	16	16
13 Ethical/moral	7.5	5	7	7	6	7	2	1	1	1	5	4
14 Physical health	5	6	6	10	12	11	8	16	13	13	9	12
15 Arts	16	16	16	12	9	10	15	12	14	14	14	14
16 Grooming	7.5	1	2	15	13	14	9	9	9	9	12	11
MEAN RANK FOR EACH AREA												
Academic	6.0	7.5	7.0	4.2	4.7	4.2	8.0	6.5	6.8	6.8	4.7	4.8
Work-related	10.0	9.6	9.8	10.2	10.6	10.6	8.0	9.0	8.6	8.6	10.4	10.0
Personal	10.0	8.6	9.0	12.0	11.0	11.6	9.6	10.4	10.4	10.4	11.2	11.4

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